



The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1851.—Vol. XLI. LONDON, SATURDAY, FEBRUARY 11, 1871. (WITH SUPPLEMENT) {PRICE FIVEPENCE. PER ANNUM, BY POST, £1 4s

MINING EXCHANGE.

THE COMMITTEE of the MINING EXCHANGE hereby NOTIFY to the PUBLIC that ITS MEMBERS are PROHIBITED, by the Rules of the Institution, from ADVERTISING SHARES at FIXED PRICES. London, February 3, 1871. W. E. JOHNSON, Secretary.

MR. JAMES CROFTS, STOCK AND SHAREBROKER,
No. 1, FINCH LANE, CORNHILL.
(ESTABLISHED 1842.)
The high price of tin is creating an immense demand for shares in good tin mines. At the ROCHFELLS TINS MINE large returns of tin can be made at a cost of about £30 per ton. Black tin is now over £50 per ton. There are five lodes opened upon in the sett; one that has been driven upon is worth 30 lbs. of tin to the ton of the lode. The supply of tinstuff is practically inexhaustible, and the agent states that profits will be returned to the shareholders directly the machinery, which is now in course of erection, is completed. Mr. CROFTS SPECIALLY RECOMMENDS these shares for a great advance in price. The mine is situated at the head of the celebrated Goss Moors, from which millions of tons of tin have been raised.
Bankers: Metropolitan Bank.

MR. W. H. BUMPUS, STOCK AND SHAREDEALER,
44, THREADNEEDLE STREET, LONDON, E.C., has FOR SALE the following SHARES, free of commission:—
30 Aberdaunant, 25s. 6d. 5 Eberhardt, £15½. 100 Postarena, 11s.
30 Anglo-Argente, 10s. 9d. 10 East Grenville, £3½. 10 Penhall.
75 Anglo-Brazil, 4s. 9d. 75 Frontino, 10s. 3d. 10 Roche Consols, 17s. 6d.
50 Australian Un., 10s. 6d. 25 Frank Mills, 28s. 9d. 15 Roman Gravel, £9½.
15 Ashton, £1½. 35 Gt. No. Lacey, 11s. 9d. 10 So. Condurrow, £5½.
20 Bwch Consols, 38s. 6d. 100 Gen. Brazil, 20s. 30 Sweetland Crk., £4½.
25 Brynystwith, 10 Great Vor, £2½. 10 Taquaril, 26s. 6d.
20 Bronfloyd, £2½. 15 Great Lacey, £18½. 15 Tankerville, £13½.
25 Bradraun Con., 27s. 20 Marke Valley, £7½. 2 Van, £5½.
15 Caldbeck Fells, 15s. 6d. 20 New Lovell, 10 Van Consols, £3 3s. 9d.
50 Chontales, 11s. 3d. 15 North Crofty, 15 West Tankerville, 33s.
10 Carn Camborne, £2½. 15 North Crofty, 15 West Tankerville, 33s.
10 Don Pedro, £2 13s. 9d. 40 Pacific, 34s. 5 W. Chiverton, £4½.
50 Drake Walls, 21s. 6d. 25 Pen'Alit, 31s. 20 West Godolphin, 29s.
60 Kelpase (164 pd.), 23s. 9d. 30 Plynlimmon, £2½. 20 Wt. Prince of Wales, 3s. 6d.
5 East Lovell, 50 Prince of Wales, 35s.
W. H. B. transacts business in every description of shares at the best market prices, and free of commission.
Daily Price-List free on application.
Bankers: The Metropolitan Bank (Limited), Cornhill, E.C.

JOHN RISLEY, (SWORN) STOCK AND SHAREBROKER,
48, THREADNEEDLE STREET, LONDON, E.C.
Bankers: London and Westminster, Lothbury.

MR. Y. CHRISTIAN, STOCK AND SHAREDEALER,
11, ROYAL EXCHANGE, E.C.
Bankers: Bank of England.

MR. G. D. SANDY, 43, THREADNEEDLE STREET,
RECOMMENDS for IMMEDIATE PURCHASE the following shares, and can afford reliable information respecting the same:—Van Consols, 40 South Condurrow, West Jewell, Hobb's Hill, West Esgrail Lie, and Tamar Valley. SPECIAL BUSINESS in all these shares.

MR. THOMAS ROSEWARTNE, 81, OLD BROAD STREET, LONDON.
WANTED TO BUY, for cash or account, the following shares:—
70 Bedford United, 50 Great Wheal Vor, 200 Taquaril.
50 Chontales, 30 Marke Valley, 10 Van.
100 Chiverton Moor, 150 Okef Tor, 40 Van Consols.
100 Carn Camborne, 150 Old Trebargett, 80 West Maria.
70 Don Pedro, 200 Prince of Wales, 50 West Tankerville.
50 Drake Walls, 25 Pen'Alit, 200 West Basset.
20 East Lovell, 60 Roman Gravel, 20 West Rose Down.
40 East Caradon, 100 Tankerville, 100 Wheal Crobar.
An OFFER WANTED for the following shares:—
East Caradon, 100 Tankerville, West Prince of Wales.
East Basset, 100 Tankerville, West Drake Walls.
Great Basset, 100 Tankerville, North Crofty.
Great Basset, 100 Tankerville, Princess of Wales.
Money advanced to any extent upon good marketable mining shares.
Bankers: Bank of England. Office hours Ten to Four.

JOHN LEAN, M.E., AND CO., STOCK AND SHARE DEALERS,
5, AUSTIN FRIARS, OLD BROAD STREET, LONDON, E.C.
J. L. late manager of Silver and Copper Mines, Chili, and more recently from Cornwall.
Gold, Silver, and other Metallic Mines examined, surveyed, and reported on at home or abroad.
Stocks or shares negotiated in every kind of available security.
We advise the immediate purchase of the TERRAS TIN shares, and can offer 35 or any less portion, if applied for at once, at £3 each. This extraordinary mine has just sold an additional parcel of tin, 5 tons, at £75 15s. per ton; and from information received they will soon double, if not triple, their returns. Those who retain their shares will be the best remunerated. Terras must soon go in the Dividend List.
Also the fully-paid ABERDAUNANT shares. These will have a considerable rise. The mine is looking well throughout.
We strongly advise the purchase of shares in the EAST LLANGYNOG at £2 5s. each. It is believed this mine will give a dividend from the sale of lead within a short period from the registration of the company.
J. L., having recently returned from Wales, is in a position to give clients the best information and advice touching those mines of interest.
Our Guide to Investors is now ready for issue. Copies forwarded on application, free to clients.

MESSRS. WM. MARLBOROUGH AND CO.,
29, BISHOPSGATE STREET WITHIN, LONDON, E.C. (Established 16 years), have FOR SALE the FOLLOWING SHARES at prices annexed:—
50 Australian Un., 10s. 50 East Seton, 22s. 6d. 20 Rosewall Hill, 29s.
25 Aberdaunant, 30s. 10 Eberhardt, £15½. 10 Roman Gravel, £9½.
25 Blue Hills, £2½. 50 Kelpase, 8s. 6d. 30 Rhylatog, £3.
20 Birdseye Creek, 20 Frank Mills, 28s. 9d. 20 So. Condurrow, £5 5s. 9d.
20 Bradraun Con., 26s. 50 Frontino, 10s. 3d. 20 South Merilyn, £3.
10 Bronfloyd, £2½. 20 Great Lovell, 34s. 5 Sweetland Crk., £4½.
20 Bedford United, 22s. 5 Great Lacey, £18½. 25 So. Gt. Work, 26s. 6d.
20 Bwch Consols, 38s. 3d. 10 Great Vor, £2½. 5 Tankerville, £13.
3 Cook's Kitchen, £19½. 30 Lovell Consols, 6s. 3 Tincroft, £49½.
50 Caldbeck Fells, 17s. 9d. 20 Marke Valley, £7½. 5 Trumpet Consols, £22.
3 Carn Brea, £15. 20 New Lovell, 35s. 20 Terras, 27s. 6d. 6d. pm.
16 Caerphilly Col., £2 13s. 1 New Seton, £20. 5 Taquaril, 26s. 6d. pm.
20 Chiv. Moor, £2 11s. 3d. 20 Nanigles, 18s. 3d. 1 Van, £5½.
20 Chiv. Valley, £2½. 20 North Crofty, 43s. 9d. 5 West Chiverton, £45½.
1 Devon Consols, £103. 10 North Lovell, £5½. 2 West Tankerville, £39½.
50 Drake Walls, 20s. 6d. 50 New Beldin, 13s. 6d. 20 W. Tankerville, £3 13s.
1 Dolcoath, £13½. 50 North Pool, 17s. 6d. 5 W. Kty. (St. Agnes), £2 8s.
5 Ding Dong, £14½. 25 Pen'Alit, 31s. 20 Wheal Uny, £4½.
20 Don Pedro, £1 18s. pm. 10 Penhall, £2½. 20 West Maria, 32s. 3d.
5 East Lovell, £21½. 50 Perran Virgin, 28s. 6d. 1 West Seton, £116.
10 East Pool, £11. 20 Plynlimmon, £2 6s. 3d. 3 Providence, £25½.
25 East Chiverton, 7s. 6d. 50 Prince of Wales, 35s. 6d.

W. M. and Co. have business in Chontales, East Terras, Pacific, Cefn Consols, Tin Valley, Great South Chiverton, Wheal Ida, Great Rock, East Llangynog, Guerrero, Trevarrack, Gellifon, Gwydyr Park, West Jewell, and Excelsior shares, and will furnish prices upon application.

MR. GEORGE BUDGE, STOCK AND SHAREDEALER,
No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 21 years), is a SELLER at net prices of:—
5 East Lovell, 10 Great Vor, 50 Van Consols, 60 Prince of Wales, 30 Roman Gravel, 15 South Condurrow, 5 Tankerville, 50 East Chiverton, 50 East Grenville, 50 Plynlimmon, 40 Drake Walls, 1 Devon Great Consols, 30 Bwch Consols, 2 Wheal Jane, 50 Trevarrack, 100 West Pant-y-go, 25 Rose and Chiverton United, 50 West Tremayne, 15 Polbreen, 20 New Lovell, 50 East Chiverton, 100 Kelpase, 200 Anglo-Brazilian, 150 Taquaril, 150 General Brazilian, 200 Rosa Grande.
Mr. BUDGE advises the purchase of Bradraun Consols shares. If investors compare this mine with others selling at higher prices, they cannot fail to recognize in it a bona fide undertaking.

BRONFLOYD MINE (LIMITED),—FOR SALE, in One Lot, ONE HUNDRED SHARES in the mine (to cover an advance), at 49s. each.
Address, GEORGE BUDGE, 4, Royal Exchange-buildings, London, E.C.

THE ROMAN GRAVELS LEAD MINING COMPANY
(NEAR THE SNAILBEACH AND TANKERVILLE LEAD MINES, SHROPSHIRE).

Particulars of this Important and Profitable Lead Mine are to be found in PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST—SYNOPSIS OF CORNISH AND DEVON MINES," &c., of Friday, Feb. 10, No. 621. Further particulars will be given in future Circulars.

MR. PETER WATSON, STOCK AND SHAREDEALER,
79, OLD BROAD STREET, LONDON, E.C.
Bankers: The Alliance Bank, and Union Bank of London.

PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST—SYNOPSIS OF CORNISH AND DEVON MINES," of Friday, Feb. 10, No. 621, price 6d. each, forwarded on application, contains information on the leading mines of Cornwall and Shropshire.

MR. EDWARD COOKE, STOCK AND MINING SHAREDEALER, 76, OLD BROAD STREET, LONDON, E.C.
Bankers: Alliance Bank.

MR. W. H. CUELL, No. 42, CORNHILL, LONDON, E.C.
Daily Price-List on application.

MR. T. A. MUNDY, STOCK AND SHAREDEALER, 38, BISHOPSGATE STREET WITHIN, E.C.
Bankers: City Bank.

MR. W. TREGELLAS, 122, BISHOPSGATE STREET WITHIN, E.C., transacts BUSINESS in all descriptions of SHARES on the most favourable terms, particularly the shares of Gold Mines with which he is fully acquainted.
TAQUARIL continues to open out in the most satisfactory manner: the stamps are in full work, and regular returns of gold being obtained, which will rapidly increase. The mail arriving this week brings accounts from the manager to the end of December, who reports having a large quantity of stuff on hand to keep the stamps constantly at work, besides box-work daily obtained from the rich shoots on both lodes, and as the mine is now dry, no further hindrances are likely to interfere with the progress of the different operations.
ECLIPSE.—The letters from Captain Barratt to the end of December report a most important discovery of a new lode of silver of extraordinary richness, which, in fact, doubles the value of the property, and is in addition to the valuable gold lodes: it is from 6 ft. to 20 ft. wide. A piece of the rock, weighing 150 lbs., is reported to be worth from £150 to £200 per ton for silver alone. This mine is likely to take rank amongst the most valuable in the country, both for its great extent and richness in gold and silver.
W. T. is prepared to give reliable information to his clients upon both these properties, to which his attention is almost exclusively directed.

MR. E. J. BARTLETT, STOCK AND SHAREDEALER, No. 30, GREAT ST. HELEN'S, LONDON, E.C., transacts business at net prices in every description of security.
SPECIAL BUSINESS in Frank Mills, Great Western, Caldbeck Fells, West Godolphin, Wheal Agar, West Tankerville, and East Seton shares.

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HOW TO INVEST, AND WHAT TO SELECT: THE CAPITALIST'S GUIDE.
"A clear and valuable reference."—Vide Press.
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MESSRS. W. DUNN AND CO., STOCK AND SHARE-DEALERS, 3 AND 4, GREAT WINCHESTER STREET BUILDINGS, LONDON, E.C.
Bankers: National Provincial Bank of England.

FOR SALE, at prices affixed:—
10 Aberdaunant, £1 10s. 40 Gt. W. Lovell, £1 14s. 5 Tankerville, £12 17s. 6d.
10 Blue Hills, £2 10s. 50 Guerero, Gold, £1 20 Taquaril, £1 5s. prem.
50 Budick Consols, £1 10s. fully paid, 10s. 20 Terras, £3.
10 Chiv. Valley, £2 10s. 10 Great Vor, £5 12s. 6d. 25 Van Consols, £3.
5 Ding Dong, £15. 45 Pen'Alit, £1 11s. 5 Virtuous Lady, £1.
50 Drake Walls, £1 1s. 10 Plynlimmon, £2 2s. 20 W. Caradon, £1 2s. 6d.
50 East Bottle Hill, 30 Prince of Wales, £1 15s. 2 Wt. Chiverton, £48.
25 East Chiverton, 9s. 2 Providence, £35s. 30 West Godolphin, £1.
5 East Lovell, £31 10s. 5 Queen, £1. 10 W. Pant-y-go, 13s. 6d.
25 East Seton, £1 5s. 10 Roman Gravel, £9 10s. 10 W. Tankerville, £2 18s.
25 Great Rock, £1 10s. 25 Rosewall Hill, £1 14s. 20 Wheal Agar, £1 3s.
50 Great So. Chiverton, 30 So. Frances, £30 15s. 4 Wh. Mary Ann, £13 13s.
2 Spear Moor, £18 10s.

SILK AND CO., STOCK AND SHARE BROKERS,
CHIEF OFFICES: 32, REGENT STREET, W.
CITY OFFICES: 16, MARK LANE, E.C.
We are prepared to negotiate the purchase or sale of STOCKS and SHARES at the closest market prices, for CASH only.
CWMEBOL, MORBEN, CROWN.—Shares in these slate quarries are recommended as safe and permanent investments.
FRANK LIMMER, Secretary.

CWMEBOL AND MORBEN SLATE QUARRIES.
The SLAB from these quarries is, from its peculiar quality, unsurpassed for BILLIARD SLABS and CISTERNS, Engraving and Enamelling.
TENDERS given for the supply of flagging and of cisterns in any number and of any size. Samples at office.
LONDON OFFICE:—32, REGENT STREET, W.
G. C. SILK, Secretary.

CROWN SLATE QUARRY.
OFFICE:—8, OLD JEWRY, E.C.
Agent for Slate—Mr. HOLLOCK, Cement Merchant, East Greenwich.
SILK AND CO. can offer to their clients a few Debentures on this valuable property, bearing 7½ per cent. interest.

MR. THOMAS THOMPSON, JUN., STOCK AND SHAREDEALER AND MINE AGENT, 5, WHITEHALL, S.W.
Mr. THOMPSON advises the immediate purchase of THORNHILL EAST GOLD shares (Victoria). The issued capital is only £15,000, which amount will contrast favourably for dividends with some of the more pretensions companies having immense capital. The mine is fully proved, and has large reserves already laid out.
Read Mr. THOMPSON'S "FINANCIAL CIRCULAR," post free for six stamps.
MR. THOMAS THOMPSON, JUN., Stock and Sharedealer and Mine Agent, 5, Whitehall, S.W.

ENDEAN AND CO., STOCK AND SHAREDEALERS,
BRITISH AND FOREIGN STOCK, SHARE, AND MINING OFFICES,
85, GRACECHURCH STREET, LONDON, E.C.

TERRAS TIN MINE.—These shares should be bought. If applied for at once, we can sell any portion of 35 shares at £3 each. It is believed they will go to £20 per share. We have received reliable information from a private party resident in the district that the time is not far distant when this mine will return from 20 to 30 tons of tin, worth £75 15s. per ton, per month. The company is limited. We advise only limited liability companies, cautioning investors to avoid the Cost-Book System as they would a serpent.
ABERDAUNANT is looking splendid throughout, and is bidding fair to be another Van. The Van lode will yield 4 tons of lead per fathom. Investors may take their agents, or go and see for themselves. These shares will have a considerable advance in price, and should be bought for investment.
We especially advise the purchase of EAST LLANGYNOG shares, at £2 10s. each. From the important discoveries already made, and the quantities of ore being brought to surface, containing rocks of solid lead from 1 cwt. to 7 cwt. each, and parcels of ore going into the market within a few weeks of the formation of the company, and knowing the adjoining mine on the same lode has paid over £1,000,000 in profits, we feel assured this mine will be in the Dividend List almost immediately. We strongly advise it to our clients, and would suggest that, from the great success of this undertaking, other properties are being secured in the district bordering upon the same name, but should be dealt in with great caution.
MR. ENDEAN, having recently returned from the Welsh mining districts, is in a position to advise whether to buy or sell in either mine now before the public.
All negotiable stocks dealt in for cash or account. Our bureau of mines and guide to bona fide investments, with price current, will be ready for issue next week. Forwarded free on application to clients.
ENDEAN and Co., 85, Gracechurch Street, London, E.C.

MR. CHARLES THOMAS, MINING AGENT, AND GENERAL SHAREDEALER,
3, GREAT ST. HELEN'S, LONDON, E.C.

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INVESTMENTS AND SPECULATIONS FOR 1871.
CHARLES THOMAS, 3, Great St. Helen's, London.

MR. T. E. W. THOMAS, STOCK AND SHAREDEALER,
3, GREAT WINCHESTER STREET BUILDINGS, E.C.
Business operations in Mining Shares negotiated at close market rates.
Daily Price-List on application.
Parties holding mining shares not having daily quotations, can learn their correct market value on application to Mr. THOMAS.

New edition, 1870, price 6d.,
SELF HELP TO PATENT LAW;
Also, price 1s.,
COLONIAL AND FOREIGN PATENT LAWS.
By GEORGE DAVIES, C.E.
Published at the Office for Patents, 4, St. Ann's-square, Manchester, by GEORGE DAVIES, C.E. (late John Davies and Son).
Established 1835.

MR. JOHN MOSS, STOCK AND SHAREDEALER,
ST. MICHAEL'S CHAMBERS, 42, CORNHILL, E.C.
Bankers: City Bank, Finch-lane, E.C.

MR. WILLIAM SEWARD, STOCK AND MINING SHARE BROKER, 19, THROGMORTON STREET, LONDON, E.C.
Every description of shares BOUGHT and SOLD at the best market prices.

MESSRS. G. LAVINGTON AND A. PENNINGTON,
44, THREADNEEDLE STREET, E.C., STOCK AND SHAREDEALERS
have SPECIAL BUSINESS in the undermentioned:—
Pacific Gold. Tankerville. Carn Camborne.
East Lovell. East Caradon. Bronfloyd.
Sweetland Creek. Taquaril. Great Rock.
Marke Valley. Tincroft. Eclipse.

TO INVESTORS.—NOW READY.
LAVINGTON AND PENNINGTON'S "MONTHLY RECORD OF INVESTMENTS," containing an exhaustive Review of the British and Foreign Stock and Share and Money Markets, &c., with an enumeration of safe investments, paying from 10 to 20 per cent. Price 6d. per copy, or 5s. annually.
G. LAVINGTON and A. PENNINGTON, 44, Threadneedle-street, London, E.C.

IMPORTANT TO INVESTORS IN BRITISH AND FOREIGN MINES, RAILWAY STOCKS, and other Securities of all descriptions.
Dividends at the rate of 5, 10, and 15 per cent.
Consult Mr. JOHN B. REYNOLDS' SPECIAL LIST OF INVESTMENTS.
Sent free by post on application to JOHN B. REYNOLDS, Stock and Share-dealer, 70 and 71, Bishopsgate-street Within, London, E.C.

MESSRS. J. HUME AND CO., 74, OLD BROAD STREET, LONDON, E.C., STOCK AND SHARE BROKERS.
Publishers of the "Investment Record and Mining Review."
SPECIAL BUSINESS in Taquaril, Eberhardt, and Eclipse.
Sales or purchases effected at closest prices.
Bankers: The London Joint-Stock Bank.

MESSRS. E. BREWIS AND CO., STOCK AND SHARE DEALERS, 18, BISHOPSGATE STREET WITHIN, LONDON, E.C.
(Opposite the National Provincial Bank of England.)
Telegrams promptly attended to.
Bankers: The Alliance Bank, London, E.C.

MR. HENRY MANSELL, STOCK AND SHAREDEALER,
34, GREAT WINCHESTER STREET, LONDON, E.C., has the following SHARES FOR SALE, for cash or account, free of commission:—
50 West Maria, 33s. 9d. 100 W. Tankerville, £3½. 20 Tankerville, £12½.
20 Carn Camborne, 38s. 9d. 20 East Llangynog, £2½. 40 Cefn Consols, £10½.
75 New Grassington, 14s. 20 New Beldin, 13s. 6d. 10 So. Condurrow, £5 5s. 9d.
20 Roman Gravel, 20 East Lovell, £32½. 100 W. Rhoswyddol, 13s. 6d.
50 Bryn Royalton, 5 Taquaril, £1½ pm. 50 New Rosario, 25s.
100 Prince of Wales, 34s. 6d. 10 Eberhardt, £1. 20 Perran Consols, 13s. 3d.
250 Gwydyr Park, 50 Holmshush and Kelly, 20 North Crofty, £2 5s. 9d.
50 Aberdaunant, 50 Bray, 60 Hamwood Consols, 4s.
25 Great Royalton, 25s. 20 Llanarmon, 50 Van Consols, £3.
70 Terras Tin, 27s. 5 Exmouth Silver-Lead, 75 Drake Walls, £1 2s. 27s.

VAN CONSOLS.—I advised the purchase of these shares at 30s.; they are now £3, and good to buy.
EAST LLANGYNOG shares are in demand at an advanced price, and should be bought at once.
West Jewell, Taquaril, South Condurrow, West Maria, Terras, and Great Vor strongly recommended.
A Daily List of Closing Prices sent to clients free on application.
Bankers: London Joint-Stock Bank.

NOTICE OF REMOVAL.
HOOKE AND CO., STOCK AND SHAREDEALERS,
LIFE, FIRE, AND MARINE INSURANCE AGENTS, have REMOVED their OFFICES to—
9, UNION COURT, OLD BROAD STREET.

We recommend investment in the ABERDAUNANT LEAD MINING COMPANY (Limited), in the Van lode, or the Van lode. This mine is now making good returns of ore, and a third parcel of lead is being prepared for market; also in the EAST LLANGYNOG LEAD MINING COMPANY (Limited), the shares in which, as we anticipated, have advanced in price, and should be purchased immediately, as the price is still rising. Investors are advised to purchase quickly into Mexican mines, the richest field now offered for English enterprise. We are always in possession of the earliest and most reliable information. The GUATAMAZIN, advised exclusively by us, has risen in value in six months from £240,000 to £360,000. We are in a position to do even better with another mine. Confidential information to clients only.
At the rate of One Guinea per annum, we give investors information on legitimate mining properties in the United Kingdom.
Our Circular for February is now ready, and contains mineral statistics of the highest value, as well as a list of approved mining and other investments. Intending investors should apply for a copy immediately. Price 6d., free to clients.

FOR SALE:—Aberdaunant; 40 Terras, fully paid; 40 East Llangynog, £2 5s.; 30 East Terras, fully paid, £1; New Rosario, fully paid, £15s.; 20 Cwm Ricket; 10 El Chico.
WANTED.—£5000, on first-class security.
Hooks and Co., 9, Union-court, Old Broad-street, London.

BARTLETT AND CHAPMAN, STOCK AND SHARE DEALERS, 36, CORNHILL, LONDON, E.C.
THE INVESTMENT CIRCULAR, published on the first Wednesday in each month. Subscription, 5s. a year, including postage; a single copy, 6d.
THE HANDY-BOOK FOR INVESTORS, comprising a sketch of the Rise, Progress, and Present Character of every species of Investment, British, Colonial, and Foreign; including an estimate of their comparative safety and profit. Bound in cloth, 10s. 6d.
BRITISH MINES AND MINING, comprising a comparison of Mining with other Investments; a description of the Mining Districts of the United Kingdom, and a detailed account of the Tin, Copper, Lead, and other Mines in Cornwall, Devon, Salop, Wales, and the Isle of Man; with a complete Glossary of Mining Terms. Bound in cloth, 2s. 6d.
Cheques to be crossed London and Westminster or Alliance Bank.

Established upwards of Twenty-five Years in Cornwall and London.
MR. JOHN R. PIKE, STOCK AND SHAREDEALER,
3, CROWN CHAMBERS, THREADNEEDLE STREET, LONDON.
Mr. PIKE can confidently advise the purchase of shares in the West Jewell, Van Consols, and Tamar Valley Mines, either for investment or speculation. There is a moral certainty of a great advance in the price of these shares.

MR. THOMAS CARTER, MINE SHAREDEALER,
CAMBORNE, CORNWALL.
BUSINESS TRANSACTED, at close market prices of the day, in all the LEADING SHARES.

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CHARGE IN

SAFETY FUSE,
FIRE TO THE
BLASTING ROCKS, &c.

Obtained the PRIZE MEDALS at the "ROYAL EXHIBITION" of 1851; at the "INTERNATIONAL EXHIBITION" of 1862, in London; at the "IMPERIAL EXHIBITION" held in Paris, in 1865; at the "INTERNATIONAL EXHIBITION" in London, 1870; at the "UNIVERSAL EXHIBITION," in Paris, 1871; and at the "GREAT INDUSTRIAL EXHIBITION," at Altona, in 1872.



BICKFORD, SMITH, AND CO.,
OF TUCKINGMILL, CORNWALL, MANUFACTURERS OF PATENT SAFETY-FUSE, having been informed that the name of their firm has been attached to some of their manufacture, beg to call the attention of the trade and public to the following announcement:—
EVERY COIL OF FUSE MANUFACTURED BY THEM HAS TWO SEPARATE THREADS PASSING THROUGH THE COLUMNS OF GUNPOWDER, and BICKFORD, SMITH, AND CO. CLAIM SUCH TWO SEPARATE THREADS AS THEIR TRADE MARK.

THE CORNWALL BLASTING POWDER COMPANY
ST. ALLEN MILLS, TRURO,
Beg to call attention to their WARRANTED WATERPROOF SAFETY BLASTING CARTRIDGES, adapted for SUBMARINE BLASTING and USE IN WET GROUND GENERALLY.
Prices and samples on application.

Titanic Steel and Iron Company
(LIMITED),
SOLE MANUFACTURERS OF

R. MUSHET'S SPECIAL STEEL,

For LATHE and PLANING TOOLS (requires no hardening);

MUSHET'S TITANIC CAST STEEL,

For ENGINEERS' TOOLS,

MINERS' DRILLS, &c.,

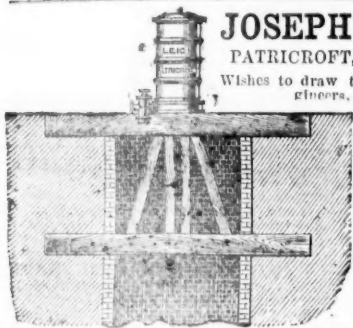
Forgings in Steel; Steel Shafting;
Piston Rods, Axles, &c.

Double Shear Steel; Spring Steel;

Blister Steel;

"TITANIC STEEL WIRE RODS."

FOREST STEEL WORKS,
COLEFORD, GLOUCESTERSHIRE.



JOSEPH D. LEIGH,
PATRICROFT, near MANCHESTER,
Wishes to draw the attention of Mining Engineers, and others, to his

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Also, every description of
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CENTRAL ENGINEERING WORKS, OLDHAM,
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Silent Fans, for blowing smiths' fires
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" " exhausting foul air,
dust, vapours, &c.
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[high and low falls.
Schiele's Turbine Water Wheels, for
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THOMAS TURTON AND SONS,
MANUFACTURERS OF

CAST STEEL for PUNCHES, TAPS, and DIES,
TURNING TOOLS, CHISELS, &c.

CAST STEEL PISTON RODS, CRANK PINS, CONNECTING RODS, STRAIGHT and CRANK AXLES, SHAFTS and

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DOUBLE SHEAR STEEL, FILES MARKED
BLISTER STEEL, T. TURTON,
SPRING STEEL, EDGER TOOLS MARKED
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Locomotive Engine, Railway Carriage and Wagon Springs and Buffers.

SHEAF WORKS AND SPRING WORKS, SHEFFIELD.
LONDON WAREHOUSE, 35, QUEEN STREET, CANNON STREET, CITY, E.C.
Where the largest stock of steel files, tools, &c., may be selected from.



By a special method of preparation, this leather is made solid, perfectly close in texture, and impervious to water; it has, therefore, all the qualifications essential for pump buckets, and is the most durable material of which they can be made. It may be had of all dealers in leather, and of

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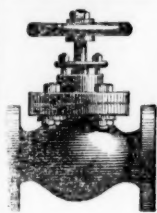
LONG LANE, SOUTHWARK, LONDON.

Prize Medals, 1851, 1855, 1862, for

MILL BANDS, HOSE, AND LEATHER FOR MACHINERY PURPOSES,

TO NERVOUS SUFFERERS—READ AND JUDGE FOR YOURSELVES.

D. B. BARNES has just published 20,000 copies of the "SECRET FRIEND," a most valuable book to young men on the Treatment and Cure of NERVOUS and PHYSICAL DEBILITY, LOSS OF MEMORY, DIMINUTION OF SIGHT, LASSITUDE, PAINS in the BACK, LOCAL WEAKNESS, DEPRESSION OF SPIRITS, &c., with plain directions for perfect restoration to health and vigor. Sent post free on receipt of two stamps. Address, Dr. J. A. BARNES, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.



IMPROVED VALVES AND TAPS,
FOR WATER, STEAM, GAS, ETC.,

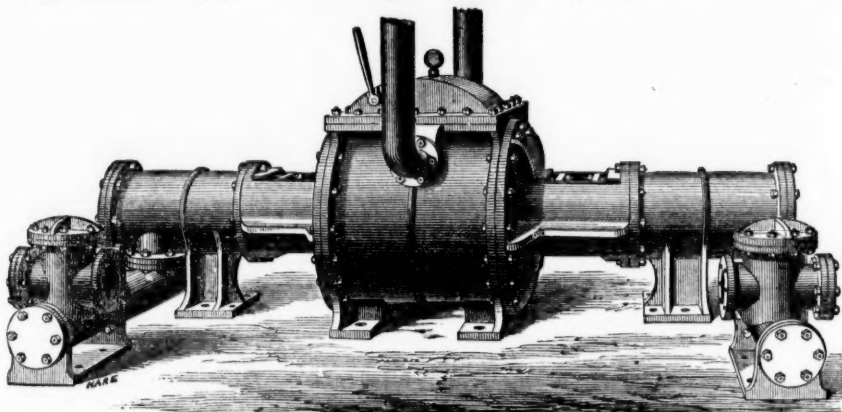
Made by MATHER AND PLATT,
SALFORD IRONWORKS, MANCHESTER.

ILLUSTRATED SHEET, WITH PRICES, CAN BE HAD ON APPLICATION.



HAYWARD TYLER AND CO'S
PATENT STEAM PUMPING MACHINERY
FOR DEEP MINES.

"The Machine erected in South Wales (at the Broad Oak Colliery, Loughor, near Llanelly), has a steam cylinder 40 inches diameter and two plungers of 8 inches diameter, and is raising 15,000 gallons of water 670 feet high per hour, the steam-boiler being on the surface. This it does with the greatest ease, the pump-valves working with scarcely any perceptible sound. The length of the incline besides the vertical lift is 490 yards."—See *Colliery Guardian*, 25th Nov., 1870.



Sole Makers, **HAYWARD TYLER & Co., Hydraulic Engineers,**
84 and 85, UPPER WHITECROSS STREET, LONDON, E.C.

CHAPLIN'S PATENT STEAM ENGINES AND BOILERS.
PRIZE MEDAL, INTERNATIONAL EXHIBITION, 1862.

STATIONERY ENGINES,

From 1 to 30-horse power. No building required.

STEAM CRANES,

1½ to 30 tons. For wharf or railway.

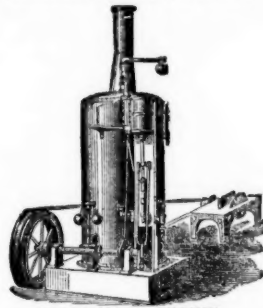
HOISTING ENGINES,

10 cwt. to 15 tons. With or without jib.

TRACTION ENGINES,

6 to 27-horse power. Light and heavy.

DONKEY FEED-ENGINES.



STATIONARY ENGINE.

The ORIGINAL Combined Vertical ENGINES and BOILERS introduced by Mr. CHAPLIN in 1855.
EACH CLASS KEPT IN STOCK FOR SALE OR HIRE.

WIMSHURST AND CO., ENGINEERS,

OFFICE: 117, CANNON STREET, LONDON, E.C.

WORKS: REGENT'S PLACE, COMMERCIAL ROAD EAST, LONDON E.

CHAS. PRICE AND CO.'S RANGOON ENGINE OIL,
AS SUPPLIED TO H.M. DOCKYARDS AND FLEET.



THIS OIL is suitable to every kind of Machinery. As a lubricant it is equal to the best Sperm or Lard Oil, while it possesses the great advantage of being entirely free from any principle which will corrode the metal bearings.

For particular kinds of Machinery, the Oil may be specially prepared of a consistency and character adapted to the nature of the work to be done.

"Chemical Laboratory, 7, Printing House-square, Blackfriars, April, 1869.

"I herewith certify that the Rangoon Engine Oil, manufactured by Messrs. Chas. Price and Co., is free from any material which can produce corrosion of the metal work of machinery. It is indeed calculated to protect metallic surfaces from oxidation.

"The lubricating power of this oil is equal to Sperm or Lard Oil.

"T. W. KEATES, F.C.S., &c., &c."

Every parcel of the Oil sent from the works bears the Trade Mark of the Firm.

LONDON: CASTLE BAYNARD, UPPER THAMES STREET.

WORKS: MILLWALL, POPLAR.

PATENT
"NE PLUS ULTRA" RESPIRATOR,
FOR
Coal Mines, Fire Brigades, Gas Companies,
Breweries, Foul Wells, Chemical Works,
Steam Ships, &c., &c.

This NEW RESPIRATOR is offered to the public as an INVALUABLE MEANS for SAVING LIFE and PROPERTY.

CERTIFICATE.

"I have used it successfully at several fires, and can with confidence recommend it as one of the most useful inventions that has ever been discovered to assist firemen in the discharge of their duties."
(Signed) **ALFRED TOZER,**
Superintendent Fire Brigade, Manchester."

PRICES:—No. 1, £8 8s.; No. 2, £9 9s.; No. 3, £10 10s. Goggles for firemen 10s. each extra. Lamps for collieries extra.

For particulars, apply to—

JAMES SINCLAIR,
46, CORPORATION STREET, MANCHESTER;
9B, NEW BROAD STREET, LONDON.



HARLECH SILVER-LEAD, COPPER, ZINC, AND SULPHUR MINING COMPANY (LIMITED).

Capital, £25,000, divided into 5000 shares of £5 each.

To be incorporated under the Companies Acts, 1862 and 1867.

Deposit £2, to be paid on application. The balance as follows:—£1 on the 29th of April, £1 on the 31st of July, and £1 on the 31st of October.

No further liability.

Power is taken under the Articles of Association to issue share warrants to bearer, and subscribers will have the option of paying up in full, as per Form of Application accompanying the prospectus.

Dividends will be payable in proportion to the amount paid upon each share of the capital of the company.

The property is held on a lease for 21 years from August, 1868 (a renewal or new lease will be granted if desired), at the moderate dues of 1-14th, and no dead rent.

DIRECTORS.

JOHN ROBERT BANNER, Esq., Walton Park, Lancaster.
THOMAS COCKELL, Esq., Lansdowne Park, London, W.
THOMAS CATTELL, Esq., M.D., Strand.
JOSEPH ALLEN, Esq., Park Road, Haverstock Hill, N.W., and Corn Exchange.

THOMAS SPARGO, Esq., Gresham House, E.C.—MANAGER.

BANKERS—IMPERIAL BANK, Lombury, London, E.C.
SOLICITOR—JOSIAH BERRY, Esq., Walbrook, E.C.

SECRETARY—MR. FRAS. H. HEARN.

OFFICES—GRESHAM HOUSE, OLD BROAD STREET, E.C.

PROSPECTUS.

This company is formed for the purpose of purchasing and working the Harlech Mines, which are situated in the parishes of Llandanwg and Llanfihangel-y-Traetham, in the county of Merioneth, North Wales.

The set is very extensive, and is traversed by several of the richest descriptions. Operations have been carried on for several years, and a large profit has been made from the sale of the ore, which is used for the manufacture of sulphuric acid. The works are now in a position to return 40 tons per day, irrespective of the silver, lead, and copper ores.

The death of the principal proprietor is the cause of this valuable property passing into the hands of the present company, it having become necessary that his interest in the undertaking should be disposed of.

The sulphur ore was only one of the products of these veins or lodes, the most valuable yield consisting of silver-lead, copper, and zinc ores; the late proprietor, however, declined to erect machinery necessary to utilise it, the object being to work for sulphur only.

It has been ascertained beyond all doubt, by the workings, that the abundance of the more valuable ores which exist can be rendered highly remunerative at a comparatively small outlay, and in a brief period. The mine has been, and still is, a profitable concern, but its value will become greatly enhanced, and increased dividends will be every certainty be relied upon after the necessary machinery has been erected.

From the published reports of the highest authorities it will be seen that the ores are more than usually rich, and that the facilities for raising them are exceptionally favourable, whilst the terms of the lease, and the liberality of the land proprietor, are unexampled.

The accompanying reports so clearly set forth the exact position of the mine that the directors deem it unnecessary to offer any description, and only add that they purpose adopting the most complete and modern machinery and appliances, with the exercise of the soundest practical economy in working the mine, thus insuring permanent prosperity.

The purchase-money of the property is £15,000, £6 00 of which is to be paid in cash, £2000 on the 20th March, 1871, £2000 on the 20th September, 1871, and the balance (£2000) on the 20th March, 1872, and £2000 in fully paid-up shares, upon the terms of a contract dated the 21st day of January, 1871, and can be seen at the offices of the company.

Any further information required by intending subscribers may be obtained upon application at the offices of the company, as also an order to inspect the property.

REPORTS.

HARLECH COPPER, LEAD, AND SULPHUR MINES, IN THE COUNTY OF MERIONETH.

Jan. 7.—These mines are situated about one and a half mile north of the ancient castle and village of Harlech, on a western spur of the great Snowdonian range, celebrated from the most remote antiquity for its prodigious yield of minerals of the descriptions found in Harlech Mines. The strata are Cambrian slates traversed by dykes of felspathic rocks, answering in all respects as equivalents to elvans; these are again crossed by enormous and erratic veins as well as numerous veins of copper, lead, and zinc, and also of silver-bearing minerals of the cardinal of north and south. Where these form junctions they usually create, as in the Harlech Mines, large and valuable deposits of metallic ores. That the locality was well appreciated in ages long passed is evident from the numerous remains and works scattered on the hills in close proximity to the Harlech. The chief object of search then was undoubtedly lead and copper ores, the "old men" knew not the use and value of the sulphur ores in this country, which will be seen in the sequel promises to become a highly important and valuable adjunct to the Harlech Mines property, though by no means to be held as a primary object of the undertaking. The set is very extensive, being more than one and a half mile square, and by the further ground will be granted if found desirable. It possesses numerous and large advantages for mining, having a huge mountain where the principal lodes run into which to drive the levels. Close to the entrance of the levels already driven, are streams of water sufficient to drive any machinery that may ever be required. Natural facilities exist by which the water may be stored to any amount to provide for a time of drought, and at a trifling cost. Wood in any quantity, suitable for all mining purposes, grows on the moor, and by the liberality of the Lord of the Manor, is to be had at little beyond the prices of cutting. The railway from South to North Wales runs within a quarter of a mile of the mine works, and a good county road equidistant, in fact they are the boundaries of the set west, so that the cheapest means of transport are at hand; excellent building stone can be raised on the mine, and lime is easily procurable; a railway has already been made, and another partially constructed, as sidings from the dressing-floors to the mine, and the mine referred to. Having said so much of the surface examination, come we now to the underground and surface mining works. Two levels have been driven upwards of 150 fathoms. Two shafts have been sunk for ventilation, and all are in perfect repair. From these levels cross-cuts have been made to two other lodes, at their junctions, and a few fathoms driven on their course for proof, which was perfectly satisfactory. The lode on which the main levels have been driven averages about 8 feet wide, underlies north about 1 foot in a fathom; the other two lodes also dip north, but not at the same incline. The ends in the cross-cuts have considerable branches of ore, and are very valuable lodes; but in the ends and back of the main lode there is a solid leader of iron pyrites (mudstone), varying from 2 to 4 feet wide; the other portion of the lode is composed of a mixture of sulphur, copper, a little blende, and on the footwall a leader of rich silver-lead about 4 in. wide at present, and letting out a good stream of water which I have no doubt whatever is the commencement of a very rich and extensive shoot of lead ore. Many hundred tons of ore must have been removed from these excavations, and I am bound to say I never saw more promising ends in my life, or backs that presented more kindly appearances. The wall of the lodes are perfectly well defined, smooth, and regular, in an unusual degree. On the hanging is a flooken which renders the working easy and cheap. I have selected specimens from various points for your examination, and am confident you will pronounce them of an extraordinary character. There are smiths' and other shops on the mine, a crusher and jigging machine, and at the entrance to the level pile of ore, and on the level a good amount of tent of some hundreds of tons, which may be turned to a good and immediate profit as soon as proper dressing machinery shall be erected.

ADVICE.—To drive the whole of the ends with all possible dispatch, as in going to hill you obtain depth; and I feel so perfectly convinced that I dare stake my professional reputation on the event, that in the lower level you have a rich bunch of silver-lead close by, as the leader gradually increases from 1/4 inch to the width I have stated; it is softer, and water flows from it. I would also suggest that other levels be opened, and that the mine be worked vigorously; there is plenty of scope, and any conceivable amount of ore within reason may be obtained. Also that the present machinery be replaced by Blake's stone-crusher and Remfrey's separator. By these appliances the cost of dressing will be lessened by three parts out of four, and the work better done. Lead which is in the mixed part of the lode would all be saved, and the copper would be well cleaned; the large vein of sulphur could be easily broken down by the stone-breaker, at a cost of 3d. per ton. This ore alone would leave a profit of at least 4s. to 5s. per ton, and 40 tons per day could be readily procured. A ready demand for the material exists, this being superior in quality, and its perfect freedom from arsenic would always command a market at the best prices, it being adapted for chemical manufactures of the most delicate character. It will be necessary to erect water-wheels for extensive dressing operations, to lay out fresh floors, &c., and, therefore, capital will be required; but the mine will become immediately productive and self-supporting, and, in an unusually brief period, permanently dividend, second to few in the Principality or elsewhere. Mundie is said to "ride a good horse," and as I firmly believe in the maxim, and as the mundie and horse are to be seen, the mine can be easily and extensively wrought by levels alone for many generations. In conclusion, allow me to say that in my experience of 40 years I never saw any mine with so great and so substantial proofs of becoming a leading one: only a little time and capital being vouchsafed, I feel confident that the mine will not only sustain its prestige as dividend-paying, but will gradually increase the profits to any extent that you may think proper to develop the splendid lodes.

GEORGE HENKIN WOOD.

EXTRACT FROM REPORT OF CAPT. PHILLIPS.

After frequent surveys, he remarks: "Had this valuable property been in Cornwall I could easily obtain you £25,000 for it at once for lead alone. The leader of lead is now 2 inches wide at the forebreast in the adit end, and going down very strong. We have a good lode in the middle level, which also is gradually improving. The driving here has been extended 9 fathoms further on than the adit, and the vein is from 9 to 10 feet wide at the forebreast. It has always been my opinion that we have one of the best mines in Wales, and as soon as the necessary dressing machinery is erected large dividends will be paid; in fact, the pyrites alone will pay for working and secure a profit."

EXTRACT FROM REPORT OF CAPT. EDWARD LLOYD.

Jan. 26, 1871.—"The discovery of lead in this mine holds good, the string when it was found was very narrow, but has gradually improved, and it is at present from 12 to 15 inches wide at the forebreast in the adit end, and going down very strong. The driving here has been extended 9 fathoms further on than the adit, and the vein is from 9 to 10 feet wide at the forebreast. It has always been my opinion that we have one of the best mines in Wales, and as soon as the necessary dressing machinery is erected large dividends will be paid; in fact, the pyrites alone will pay for working and secure a profit."

CAPT. WILLIAM HARPER, of Cornwall, who surveyed the mine says, as to cost of raising: "Working into consideration that every ton of stone raised from the leadings, and by stopping the backs in a manner so as to be always opening

the mine in a thoroughly practical and miner-like way, the cost of the saleable pyrites when cleaned and ready for shipment, including wear and tear, will not exceed 8s. to 10s. per ton; but my confidence is reposed in the lead produce, which, with the sulphur, is there, so that anyone may perceive it."

N.B.—It will be seen by the proposed mode of working the cost of dressing the sulphur will be very greatly reduced.

From Prof. WHITE, Assayer and Analytical Chemist, 25, Finsbury-place, London, E.C., 19th January, 1871.

SAMPLE MARKED "SULPHUR ORE."

Sulphur	52.1
Iron	44.1
Silica	3.8=100

In handing in the results of my analysis of the ore, I beg to append two remarks upon the value of the material. Those remarks, however, are conclusions only, and do not state the mine can only just be said to have started; however, now the works both at surface and underground are all in splendid working order, and there is a good batch of tin well on for the next sale. It is a well-known fact that the tin from this mine (and over £10,000 has been sold) is of the very highest quality, and brings the highest price of the market. Nearly all the work is done by contract, and the men earn good wages. The quantity of tin-bearing stuff in reserve is enormous, and will last at the present rate of consumption for some dozens of years.

Views have been taken of the surface-works of the mine, and may be obtained by shareholders on application to Mr. G. H. POULTON, of Torquay, who also has the remaining unplaced shares for sale at £2 each, fully paid.

THE CASTLE AU DINAS TIN MINE.

This property, once known as the Royalton, is now again in full work. The company has been registered under the Limited Liability Acts, 1862 and 1867. The vendor guarantees a dividend of 10 per cent. for three years.

To show how far the company were right in purchasing this property, it may be stated that, at a cost of less than £100, £250 of tin has been sold, and, as the works were left in such a sad state, the mine can only just be said to have started; however, now the works both at surface and underground are all in splendid working order, and there is a good batch of tin well on for the next sale. It is a well-known fact that the tin from this mine (and over £10,000 has been sold) is of the very highest quality, and brings the highest price of the market. Nearly all the work is done by contract, and the men earn good wages. The quantity of tin-bearing stuff in reserve is enormous, and will last at the present rate of consumption for some dozens of years.

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Original Correspondence.

PROVIDENCE MINES.

SIR,—We must request that you send us the name of the correspondent whose letter appeared in the Notices to Correspondents of last week's Journal. We feel persuaded that no one of the 250 shareholders scattered over Great Britain and the Continent could have sent such a communication of neglect to the *Mining Journal*,—and we wish you to insert this in your next issue.

Pensance, Feb. 8. SAMUEL HIGGS AND SONS, Purser.

EAST LOVELL.

SIR,—Allow me a line in the Journal to reply in part to the remarks of Messrs. Quentrell, Rogers, and Michell. Absence in Cornwall prevents my entering in detail into all their remarks, suffice it to say that the plan I sent you was made three weeks before it was inserted in the Journal, and consequently the tin ground may have been diminished considerably. This presumption would seem warranted by the remarks I have heard from more than one or two agents who are thoroughly conversant with the mine, that "the plan is far too favourable." Is this the case in which Captain Quentrell says it is incorrect? When people descend to argue on motives their weak case exposes itself. I need, therefore, make no remarks on what people say, but let them show where I am wrong. Capt. Quentrell says, "the nearer the granite the richer the tin"—ergo, nearer exhaustion, which has been the pith of all my remarks on this mine. If anyone can correct the plan, or expose any motive than that of the interest in legitimate mining, I shall be glad to go into details.

H. WADDINGTON.

EAST Llangynog Mine.

SIR,—I was surprised and annoyed at seeing a report in the *Mining Journal* of Dec. 31, of this mine, purporting to have come from me, and stating the lode to be worth about 100l. per fathom: words that I never could nor did make use of, when, in fact, I have not inspected nor reported on this mine for the last 11 or 12 years.—Graig-las, Llangynog, Oswestry, Feb. 7. JAMES THOMAS, Late manager of the Llangynog Mines.

NORTH TRESKERBY MINE.

SIR,—The meeting of this mine, which took place on Tuesday, must have shown Cornish pursers that the day has gone by for them to act in defiance of the wishes of the shareholders. There were nearly 50 shareholders present who supported Mr. H. L. Phillips and Capt. R. Pryor, and carried the resolutions which will be shortly in the hands of the shareholders. Mr. B. Matthews thought he could do Capt. Pryor mischief by issuing a pamphlet of misstatements, but, to the credit of the Cornish shareholders, they mustered in strength to support Capt. Pryor, and passed a resolution expressive of their confidence in him, and what he had done for the benefit of the mine and the shareholders. Fancy a purser telling the shareholders that he protested against being turned out of office four months ago, and that he considered he was entitled to salary for the period he had been discharged, and that he meant to claim it. His efficiency may be judged by the fact that an item of 104l. in his last accounts was stated to be for subsist to the miners, but which appears to have mainly consisted of count-house expenses. The shareholders, however, would not pass the item in question, and it is to be gone into by the present executive. I have attended many mine meetings in Cornwall in the course of my life, but I was never so pleased as with the result of the North Treskerby meeting on Tuesday. A REDRUTH ADVENTURER.

Redruth, Feb. 8.

THE VIRTUOUS LADY MINE.

SIR,—I have just returned from an inspection of this mine, where reports of recent great improvements had attracted me, and I regret that want of time precludes my giving a full account of the aspect of matters there. I wish to say, however, in a few words, that the shaft is now holed to the granite south lode, where an immense deposit of rich ore is being laid open. The agent, I see, values the part of the lode carried at 50l. per fathom, but taking in the full height and width (as far as seen) of the lode that figure does not represent even an approximation of its value. It is indisputably a magnificent deposit of ore, such as the old mine was famous for, and as there are at the distance of only a few fathoms two other lodes of the same description the new mine must be a great success.

The tin lodes also, at the other end of the sett, are rich. Immediately opposite, and separated only by a stream of water, is the "Gem" Mine, which, after only three months' working, has some tons of tin ready for the market, and will pay a dividend at the end of the current month. The Virtuous Lady has the same lodes, and apparently the better parts of them. The stamps were started on Saturday, and tin will soon be sent to market. Altogether the success of the mine seems assured.—Feb. 10. JUCUNDUS.

MINING IN CARDIGANSHIRE—CONTRACTING.

SIR,—Seeing a letter under this head in the Supplement to last week's Journal, signed "Merchant," wherein the writer seems to depreciate the system of advertising and contracting, amongst other matters which he brings forward, I think it impossible for me to be silent, as I have no doubt as to the value of the only one in this county connected with mining at present, who in the eyes of "Merchant" carries out such a dreadful system.

However, the advantages of contracting must be obvious. It relieves the shareholders from any uncertainty as to time and the outlay required, and ensures the work to be done in a proper manner before paying for it; whilst on the other hand time wasted and work improperly done has not unfrequently led to the abandonment of mines that otherwise would have proved successful. Besides, contracting generally leads parties to see what has been done for themselves, and which at the same time gives an opportunity for the general inspection of the property.

Having had upwards of 30 years' experience of the mines in Cardiganshire, and having dined, surveyed, and mapped more than 9-10ths of all of them, as well as being called to report on properties in America, Norway, Isle of Man, Cornwall, and Devon, and nearly every mineral county in England and Wales, I think it impossible for me to be silent, as I have no doubt as to the value of the only one in this county connected with mining at present, who in the eyes of "Merchant" carries out such a dreadful system.

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Worsley Messes, Wigan, Feb. 7. ONE IN THE DARK.

[For remainder of Original Correspondence see this day's Supplement.]

AMERICAN SECURITIES.—For the information of those interested in American securities, Messrs. Jay Cooke, McCulloch, and Co., of Lombard-street (the London branch of the banking house of Jay Cooke and Co., of New York) issue a weekly financial circular, containing much valuable money market and commercial intelligence. Affairs in Wall-street have wholly recovered from the temporary irregularities recently noted. There has been a reaction of 5 to 15 per cent. in Union Pacific Railroad securities; it is understood that arrangements have been made which will enable the company to liquidate the whole of its floating debt, amounting to \$3,000,000, as it matures. Arrangements are being made for establishing a monthly steam service between San Francisco and New Zealand, and Australia, especially designed to attract passenger traffic. In railway shares there is a more active movement, but in such operations a

spirit of caution prevails, which renders impossible a repetition of the speculative excesses of late years. There is an excellent price list appended to the Circular.

Meetings of Mining Companies.

MWYNDY IRON ORE COMPANY.

The ninth annual general meeting will be held on Wednesday. The report of the directors to be submitted states that the receipts for 1870 amounted to 34,172. 8s. 3d., and the expenditure to 22,352. 4s. 4d., showing a profit of 12,037. 3s. 11d., out of which 6,000. 10s. 11d. has been paid for interest, and 11,377. 13s. has been carried to the credit of the profit and loss account. A further sum of 700.7. has this year been paid off the mortgage debt, the funds for which were provided by the issue of mortgage debentures for 4500. and 2400. paid out of, and debited to, the profit and loss account, in addition to 1000. already charged to that account, and used in the payment of the 700.7. of mortgage instalment paid last year; thus leaving a balance at the credit of the profit and loss account of 9567. 8s. 10d. The directors recommend a dividend of 4s. per share free of income tax, amounting to 8000.7. leaving a balance of 1767. 13s. 11d. forward. The total indebtedness of the company on mortgage and mortgage debentures is now reduced to 10,000. The directors have determined to make search for iron ore in a property adjoining the Mwyndy property, and containing the same geological features, and arrangements have been made with the vendors for that purpose.

The report of the directing managers (Messrs. John Taylor and Sons) stated that the quantity of iron ore raised last year was 63,191 tons, or 942 tons more than in 1869, and more than in any previous year. The sale of iron ore was dull for several months of last year, but it has now somewhat improved, and should the result of the present peace negotiations be favourable a much more active trade in iron will ensue. The average price of the ore sold in 1870 is somewhat higher than in 1869. The various levels in the mine have not been so productive as in former years, and have consequently not laid open so much ore ground; but there are still several points of good promise, and the trials are being vigorously pushed forward. The profit made during the last year has been satisfactory, and a good commencement has been made for the current year.

NORTH TRESKERBY MINING COMPANY.

A general meeting of shareholders was held at the account-house, on Tuesday, Mr. H. L. PHILLIPS (of London) in the chair.

The accounts showed a debit balance of 1234. 13s. 5d., the loss on the four months ending with December amounting to 417. 12s. 3d.

The agent's report was read, and also the reports of Captain T. Richards and Captain Jennings. The conflicting nature of these reports was the subject of considerable discussion, but the feeling of the meeting was strongly in favour of Captain Pryor, and his report was adopted. The accounts were passed, and a call of 4s. per share was made.

The CHAIRMAN then read the statement of accounts presented by the late purser (Mr. B. Matthews) in which a sum of 1027. 00d. which had been charged as subsist, was placed as an asset of the company. This the chairman asked for an explanation of.

Captain PRYOR, the manager, stated that no such sum ought to have been charged; and, after some further examination of the books, it was elicited that the whole of the amount was not actually advanced as subsist to the miners, but that some other charges, amounting to 500.7. should have been charged to petty cash. It was resolved that the settlement of the disputed accounts be left to the Chairman and the late purser.

The CHAIRMAN, who it may be mentioned held 1000 shares, read a letter from Mr. Downing, the lords' agent, respecting an application for an extension of the set, and was of opinion that the ground on which it was made was not sufficient. It was decided that this matter should be left in the hands of the purser and manager to obtain such an extension of ground as may be necessary for the effectual working of the mine.

It was then resolved "That the thanks of the meeting be given to Captain Pryor, and that the meeting expresses their unabated confidence to him."

A vote of thanks to the Chairman terminated the proceedings, who stated that he had received several telegrams during the progress of the meeting recording some hundred of additional votes in his favour.

CWM DWYFOR COPPER AND SILVER-LEAD MINES COMPANY.

The general meeting of shareholders was held at the company's offices, St. Clement's House, City, on Monday.

Mr. JOSEPH HOPGOOD in the chair.

The report and statement of accounts were received and adopted. The retiring directors were unanimously re-elected. Messrs. W. A. Brown and James Smith having been duly nominated and seconded were elected directors. Mr. Edward Brooks was elected auditor.

The report of Mr. George Henwood, C.E., on this extraordinary property having been circulated among the shareholders, it was decided that the directors should take occasion to confirm his statements as to the prospects of the mines, and advertised especially to the great impetus which would be given to the development of the property by the construction of the railway from the mines to Port Madoc, which will shortly be completed.

CARDIGAN BAY MINING COMPANY.

By order of the board, the following enquiries were sent to Capt. G. Williams on the 30th ult. 1.—1. The exact quantity of dressed ore, the quality being ascertained and ready for dressing.—2. When you will be ready to commence work, and at what cost?—3. The exact condition of the mine. If an answer is required.

Previously to the annual general meeting, which will be held in March, a competent and independent agent will be employed to test the accuracy of our manager's answers, as, if he be not too sanguine, it will be perceived that, notwithstanding the many disappointments and delays, the shareholders possess a very valuable property.

Feb. 4.—In reply to your letter of Jan. 29, I beg to forward you the following information:—1. The quantity of dressed ore is about 25 tons.—2. The quantity of ore already broken and available for dressing is about 20 tons.—3. I shall be ready to sample from about 50 to 60 tons on March 1 next.—4. Condition of the Mine: The lode in the 10, west of engine-shaft, is 8 ft. wide, carrying two regular ribs of ore, one 2 in. and the other 3 in. thick, of pure metal. The other portion of the lode consists of spar and slate, in which is a small quantity of ore throughout, altogether worth 40l. per fathom. I have no objection to saying we are opening out here one of the best lodes that I ever saw in Cardiganshire, and ultimately the results in the shape of sales of ore will prove satisfactory.—5. Eastern Adit: The lode in the slope in the back over this level is 3 ft. wide, carrying a rib of ore on the south wall 2 in. thick, of nearly pure metal; the other part of the lode consists of quartz, slate, and iron, an excellent looking lode.—North Adit: The slope in the back over the adit level will yield 1 ton of rich ore per fathom.—6. Western Adit: The ore in this adit has just been taken into a very strong branch of spar, interlarded with blende and quartz, &c. I believe this will turn out to be the lode we are seeking for. I shall be able to let you know more about it in a few days.—Boundary Adit: This lode is the end driving towards the old mine is improving rapidly, and a very good source of ore will be in along the back. I have put the men to work on a few feet to prove its value, and am glad to say we are breaking splendid stuff for the crusher.—South and South Lode: The water has overflowed us in this lode for the present, the lode in the bottom being as rich as ever.—Penarth Old Adit: We shall complete the pitwork and drain the old mine to the bottom in the course of this month, after which we shall be in a position to return 4 tons of ore monthly to market, at about half profit, and increase the returns as the mine develops to double that quantity. All our machinery is now in excellent repair, and working well.—CHARLES WILLIAMS.

Postscript to letter received Feb. 7.—Pensance: This lode has further improved this morning, and is a splendid looking lode, over 9 feet wide, very thorough-out.—CHARLES WILLIAMS.

NORTH TRESKERBY MINE.—Capt. Richard Pryor has issued a pamphlet, entitled "An Answer to Mr. B. Matthews' Letter of Dec. 24." Capt. Pryor adverts to the leading phases in the history of the mine since he became its manager, and contradicts upon documentary evidence the statements made by his opponent, and concludes by saying that the removal of Mr. Matthews from the office of purser has led to the introduction of a gentleman of the highest respectability to represent the company's interests. Mr. H. L. Phillips is an honourable man, and has done much good to Cornwall by bringing capital into its mines, having at this time no less than seven mines in the county.

CLIFFORD AMALGAMATED.—A case involving a claim of many thousand pounds has been before the Vice-Warden of the Stannaries. The executors of the late Sir William Williams, Bart., and Sir F. M. Williams, as treasurer of the mines since his father's death, claimed to be allowed to prove for moneys advanced towards defraying the cost of working the mines. The original claim was for £12,000, which was subsequently reduced to £11,307.1. Sir Frederick having been a creditor to the credit of his father's account, Mr. J. B. Pugh, purser, and the executors and Sir F. M. Williams; Mr. Chilcott, Mr. Marack, and Mr. Cuck opposed the claim on behalf of shareholders and contributories; Mr. R. M. Pugh represented the official liquidators. It was agreed that there was no doubt the money claimed had been advanced and used for the working of the mine. Mr. Chilcott objected, upon the technical ground that the cash should have been made by the mine committee, and not by the executors and treasurer, and that the account, instead of being limited to little more than two years, should have gone back to the establishment of the company in 1851. His substantial objection, however, was that the two monthly statements sent out to the shareholders were grossly incorrect. He did not mean to impute improper motives to anyone, but he ended that the parties who had been negligent of their duties in the account, instead of being allowed to come into Court and ask for payment of that money. Mr. Marack said the simple question was whether two or more gentlemen who had the financial management of a coal-worked company, and who had superseded from their co-venturers and employees the knowledge of certain debts owing by the company, could come into a Court of equity and ask to be paid out of the pockets of those shareholders from whom they had thus withheld all knowledge of their obligations. He argued that the present claim could not be urged against the company, and that if the committee who were, or ought to be, the real claimants, could sue these adventurers who objected to the suppression of liabilities, such adventurers would have a good defence to any such claim, and, a fortiori, in regard to proceedings in a Court of equity. Mr. Cuck followed on the same side. Mr. J. B. Pugh urged, in reply, that at every meeting the merchants' ledger, bankers', and cost-book were submitted

to the shareholders. It was impossible to believe that there had been a suppression of facts for any improper purpose—no doubt it was considered there would be an improvement in the price of tin and copper, and then this 10,000 would have been paid off in a very short time. If the price of tin had been then what it is now in all probability Clifford might have been maintained. The Vice-Chancellor took time to consider. It may be added that Mr. Henry Michell has stated that the books of the mine showed that there was a debt unpaid in the cost-book of 10,122, for supplies, and that between 7000 and 8000 of this amount had been contracted in the two years preceding his examination of the accounts.

IMPROVED TREATMENT OF SILVER ORES. THE STETEFELDT FURNACE.

This Furnace, to which reference has recently been from time to time made at the meetings of English companies for working mines in the Pacific States, was invented by Mr. C. A. STETEFELDT, of Nevada, U.S., and is intended for roasting, or rather chloridising, ore after it has passed through a mill battery. It is a shaft furnace, in which the pulp is not roasted by stirring, as in the reverberatory furnace, but by falling through the flame. The shaft is about 30 ft. high. On the top of it is the feeding machine, consisting of a cast-iron water-frame, that supports a punched screen, closely over which moves a wire cloth, cutting the pulp and forcing it through the screen. The pulp is hoisted by an elevator into this feeding machine, which delivers it in the form of a fine rain to the shaft. Thus each particle falls, as it were, separately through the flame, and is fully exposed to it. The roasted pulp collects at the bottom of the shaft, whence it is drawn out as needed. The flame necessary for the process is created in two lateral gas generators, which admit the flame 3 feet above the bottom of the shaft. The flue-bridge is 3 ft. below the top of the furnace.

Connected with the furnace proper is a system of dust-chambers, compelling the draft to perform a zig-zag line before reaching the smoke-stack. The connection between the shaft and the dust-chambers is effected by a vertical flue passing down one side of the shaft. This flue is provided with a third gas generator, the office of which is to roast that portion of the pulp which, in consequence of its fineness, is carried away by the draft, and thus prevented from falling through the flame and getting roasted. The gas generators are constructed for using charcoal, but we hear that a modification of the furnace is now being made, so as to use firewood for fuel instead of charcoal, which reduces the price of construction, as the gas generators are done away with. The percentage of salt to be added varies from 5 to 10 per cent. The furnace reduces the expense of roasting as compared with the reverberatory furnace. It is also claimed that by this process ores can be worked closer than by the old process. A furnace with the capacity of from 15 to 30 tons of ore in 24 hours consumes from two to four cords of wood, or the equivalent in charcoal. Eight men (two to feed, three to fire, and three to draw and cool the roasted ore) are required at the largest furnace in 24 hours. Silver ore by this process should never be chloridised below 90 per cent. As yet but few experiments have been made with gold ores.

CRUSHING AND DRESSING ORES.

The efforts to substitute air for water in the dressing of ores have been frequently referred to in the Journal during the last 20 years, but difficulties have usually been met with in practice which have prevented the general application of the machines proposed. Mr. Krom, mechanical engineer, of New York, claims, however, to have overcome all obstacles, and for some time past his dry ore concentrators have been largely used in the United States. The machine is similar in principle to the ordinary jigging machine—Hunt's, for example—but air is used instead of water for the separation of the ore from the gangue. The crushed ore falls upon the screen, or ore-bed, from a hopper furnished with a gate, to regulate the flow of ore, and keep the layer being acted upon of uniform thickness. The ore is lifted by the puffs of air from bellows operated by a trip-wheel and spring. It is remarked that the spring is calculated to produce the best result, as it is important that the puff of air should be sudden. There are six projections on the trip-wheel, so that the moderate speed of 50 to 70 revolutions per minute of the pulley gives 300 to 400 upward movements of the bellows; this speed is sufficient to give a steady movement to the balance-pulley, and yet not so fast as to produce any unpleasant jar or noise, the machine working smoothly and easily. The ore-bed is described as a very valuable and entirely novel feature; it is composed of wire-gauze tubes, placed from $\frac{1}{2}$ in. to $\frac{3}{4}$ in. apart, according to the kind or grade of ore to be treated. The finely crushed ores require that the tubes be placed nearer each other, while the coarser grades allow them to be further apart. The ore-bed made of these tubes is placed at the front of these bellows, and the ends of the tubes next to the bellows are open, to admit the air, which escapes at the top and sides, agitating the ore which lies on the tubes, and also that between them near the surface. The tubes are open at the bottom, so that any fine ore passing through the meshes of the wire-gauze immediately falls with the main sinking column; the tubes are, therefore, always entirely free from obstruction.

With regard to the separation of ore generally, Mr. Krom observes that not only is the mechanical concentration of ores based upon the difference of specific gravity, but the influence of specific gravity decreases with the increasing fineness of the particles; so that in the condition of the finest slimes the action of specific gravity is almost nothing. Such material will float long distances when subjected to the action of water, and will also float in air when sufficiently dry. The material should be left, if possible, in a granular state. He points out that, according to Rittinger, crushed ore from rollers gives—Coarse grains, 70 per cent.; sand, 20 per cent.; flour and dust, 10 per cent. And wet crushing under stamps, through 5-32 inch holes—Sand, 32 per cent.; flour, 32 per cent.; and dust, 36 per cent. Thus, while stamps produce 68 per cent. of flour and dust, leaving only 32 per cent. of suitable stuff for concentrating, rollers give 90 per cent. of material of the proper size for subsequent treatment. As Mr. Krom leaves no room to doubt that he has thoroughly studied the principle of ore concentrating, and seems to have used his best efforts to construct his machine in accordance with those principles, it is probable that the invention might be turned to good account in this country, where there are many mines which occasionally suffer severely from want of water.

PEAT AS FUEL FOR LOCOMOTIVES.

Although the abundance of mineral fuel in England has done much to prevent the utilisation of peat at home, it appears likely that in India, where the high price of coal, coke, and patent fuel so greatly increases the working expenses of railways as seriously to entrench upon profits, peat will be made to render important services by utilising it as a fuel for locomotives. The matter has just been brought before the India Committee of the Society of Arts by Lieut.-Col. Romaine Wragge, and from the facts adduced it seems that, with the exception of the lines passing through Bengal and Central India, which will possess the advantage of native coal, the use of peat will effect a saving of from 30 to 50 per cent., according to locality, whether compared with either native or imported coal. All the Indian railways are dependent either upon England, Australia, or Labuan for their supplies of coal, with the exception of the East Indian Railway, which has collieries at Ranagunj, and these collieries cannot be rendered available for the supply of the other Indian lines, owing to the extremely high rate of freight, both by rail and by the coast, round the peninsula of India.

Condensed peat (compressed peat is found not to answer) is proposed, not only for locomotive purposes, but for ironworks, sugar manufactories, and coasting steamers; and as it is described as being found on the Neilgherries, and generally distributed over the entire range of the hill tract, being so abundant that it is sold at the bog side at 1s. per cartload of 1000 lbs., there would seem to be nothing to prevent its extensive use. It is estimated that by the substitution of peat for the fuel now used the annual saving effected would be—on the Madras line, 29,362l.; on the Great Southern Railway, 7383l.; on the Great Indian Peninsula Railway, 65,569l.; and on the Bombay, Baroda, and Central Indian Railway, 21,719l.—124,033l. on these four lines alone. The use of peat will also save the railways from the great expense to which they are occasionally put by the trains

being fired, owing to the sparks thrown off by wood fuel, which sometimes destroys valuable merchandise in transit, the destruction of which has to be made good by the railway companies. There are no sparks thrown off during the combustion of peat.

The whole question of utilising peat in India is, doubtless, one of the utmost importance, so that the views of those who have succeeded in preparing it cheaply, and of suitable quality, cannot fail to be generally acceptable.

THE CAPE, AND THE DIAMOND FIELDS.

The diamond fields on the banks of the Vaal River continue very productive, and gems of great value were brought home in the Roman, which arrived at Plymouth, on Monday. Mr. John Campbell, the newly-appointed special magistrate, had arrived at the fields, and had assumed the duties devolving on him. He had been warmly welcomed by the diggers, and the only regret felt was at the limited character of his powers. It was hoped, however, that steps would shortly be taken to extend British rule to that important portion of South Africa. During the past month several parties of diggers had returned to the colony, to avoid the great heat which prevails across the Orange River during the summer. The majority expressed their intention of returning about March or April. The general health of the diggers was good, and the site of the original settlement was rapidly assuming the appearance of a town. The Inland Transport Company, which had been started in Cape Town, was fairly in operation, and was conveying passengers and their luggage to the fields in nine days. The wagons of the company were said to be fitted up with every regard for the comfort of passengers, and the cattle are described as of the best description. The fare from Cape Town to the fields is 12l. The following interesting table, showing the value of the diamond shipments for the past two years, is from the *Standard and Mail* of Jan. 4:—

OFFICIAL STATEMENT OF DIAMONDS SHIPPED FROM PORT ELIZABETH UPON WHICH WHARFAGE HAS BEEN PAID.

1869—January.....	Briton	1 diamond, valued at £	806
May	Celt	5 diamonds, valued at	400
June	Cambrian	"	200
August	Northam	"	205
"	Briton	"	2,000
September	Celt	"	1,000
October	Saxon	"	800
"	Mary	"	1,400
November	Norseman	"	100
"	Northam	"	500
Shipped during 1869	141	"	£ 7,405
1870—April 14	Asla	8 diamonds, valued at £	150
May 14	Briton	"	75
May 30	Roman	"	4,145
June 14	Norseman	"	375
June 29	Northam	"	2,800
Aug. 13	Cambrian	"	9,005
Aug. 30	Briton	"	1,200
Sept. 14	Roman	"	13,195
Sept. 29	Norseman	"	15,475
Oct. 15	Northam	"	8,850
Oct. 31	Saxon	"	1,225
Nov. 13	Celt	"	22,255
Nov. 29	Cambrian	"	7,135
Dec. 14	Briton	"	11,448
Dec. 29	Roman	"	27,487
Shipped during 1870	5061	"	£124,910
Total for the two years 5802	"	"	£132,315

To the above must be added the "Star of South Africa," valued at 11,500l.; 26 forwarded per post by the Celt (duly registered), valued at 1300l.; 12 by the Roman's mail, valued at 350l.; and a parcel sent per Natal, valued at 1300l.—giving the value of diamonds forwarded from Port Elizabeth alone at 146,765l. The above figures are altogether irrespective of the shipments from Table Bay and Natal, as to which no reliable returns can be obtained; but it is estimated that the total shipments of diamonds during 1870 have reached a value of about 220,000l.

The Government had engaged the services of Dr. Atherstone and Mr. T. Bain, of Grahamstown, to make a thorough geological exploration of the reported gold fields in the Karoo.

KING ARTHUR SILVER-LEAD MINE (TINTAGEL).

The position of this mine is most romantic and historical. It is situated at the foot of a high cliff on the Peninsula, on the summit of which, 500 ft. high, stands the castle that tradition and Tennyson have assigned to King Arthur, of noble memory.

This spot is of great antiquarian repute, and well worthy a visit from the tourist, geologist, and miner, especially the latter, as its mining operations were probably among the earliest in the Duchy. The evidence of this may be observed in an immense cavern extending through the Peninsula. Here along the roof may be seen the remains of a powerful lode, from which can be broken thin layers of malachite and spots of silver ore (polytellite). It was from this lode, no doubt, in bygone days that the mineral was derived that coined King Arthur's "silver crowns" in the Royal Mint in the castle above. A level has been driven on a parallel lode, which is from 2 to 3 feet wide, carrying a thin band of flocon, gossan (rich for silver), friable quartz, spots of rich copper, and a course of lead ore from 6 to 8 in. in width, which has produced some tons of silver-lead, realising 16l. 5s. per ton. This lode having been thus far proved, a shaft 12 ft. by 4 ft. was commenced last week on the course of the lode. It will be sunk as expeditiously as possible to the depth of 20 fms., at which point a cross-cut will be driven to intersect and open out the other lodes and branches.

Judging from the amount of silver-lead ore already raised and sold from the adit level, the numerous feeders, or strings, of solid lead, some an inch wide, that will drop into the main lode in depth, very profitable results are expected when the shaft is carried down a sufficient depth, and the main and other parallel lodes intersected and opened out. The stratum consists of killas or clay-slate, such as is always found in important argentiferous lead districts. The lodes are intersected by cross-courses, which always act as fertilisers, or feeders, causing deposits of ore in the lodes with which they come in contact, although they may be themselves unproductive of mineral. This was eminently the case at the neighbouring mine of Old Treburget, whose large deposits of ore were found at the junction, with cross-courses or caunter lodes.

The lodes and cross-courses can be seen in the cliffs 500 to 600 ft. high, showing a section of a mine, and enabling the best spot to be selected for explorations, thus saving both time and money. The present operations are being carried on a little above high-water mark.

Few young mines in Cornwall show such mineral indications, or offer such facilities of economical working, as King Arthur, from the fact of there being water-power from a never-failing stream, sufficient to pump, wind, and dress the ore. Such an advantage cannot be overstated in a calculation of future results, especially as, in addition, the ore can be shipped at the mine for 2s. 6d. per ton.

MINING AS AN INVESTMENT.—A correspondent writes:—"I have found Cornish mines pay me well, and I narrowly watch the sources of mining information. I will suppose for one moment that I have 1000l. to invest, and that I were to embark in the following mines at the annexed prices:—

Dolcoath, 1 share	Market price, £128 ..	Annual dividend, £18 0
Providence, 5 shares	" 155 ..	" 25 0
Marke Valley, 24 shares	" 160 ..	" 20 8
Tincroft, 4 shares	" 160 ..	" 21 10
W. Chiverton, 3 shares	" 156 ..	" 24 0
Wheal Jane, 3 shares	" 171 ..	" 27 0
Total	£1000 ..	£135 18

Now, for the investment of 1000l. I should, at present prices, get 135l. 18s. a year, just 13½ per cent. They are all, of course, speculations; but you cannot have 13½ per cent. unless you speculate a little. If you will not speculate, go into the "glorious Three per Cents." But I consider that four out of the six mentioned mines, at least, are sound, well conducted, legitimate concerns. Of course, if matters change for the worse you can at once sell out, and 'cut short your losses'; or, should prices considerably advance, you can 'realised your gains.' The market must, however, be watched. A friend of mine, who through Cornish mine speculations gave up his situation

under a crusty employer, now lives independent on a tidy little income of 370l. a year. Mind one thing, however—never speculate with other people's money. Further—do not put all your savings in one kind of investment."

MINING NOTABILIA.

[EXTRACTS FROM OUR MINING CORRESPONDENCE.]

Camborne, Feb. 9.—The Mine Share Market continues to be very brisk, and there is a good demand for tin stock especially. Those dealt in here have been Tincroft, Cook's Kitchen, Carn Brea, North Crofty, South Condorow, Wheal Uny, Wheal Agar, South Crofty, South Frances, Rosewall Hill and Ransom United, Great Vor, East Wheal Seton, East Lovell, New Wheal Lovell, and Carn Camborne. Tincroft, 49 to 50; this mine is looking well, and at the next meeting a dividend of 2l. per share will be declared. Cook's Kitchen, 19 to 19½—firm. Carn Brea, 41 to 43, and in demand; this is a good share to buy; it is reported by some they will require a call of 10l. per share, which is absurd, as from reliable authority there will be nothing of the sort required. North Crofty, 2½ to 2¾. South Condorow, 5½ to 5¾, with a good demand; this mine is opening up well, and must go much higher in price before long; the improvement in the winze reported last week is turning out much better than anticipated. Great Vor, 5 to 5½; these shares have receded from 8 during the past week, owing to a serious run in Tincroft's shaft; the extent is not yet known. Carn Camborne, 37 to 41; this mine is improving generally, and shares are worth buying. Tin and copper steady.

THE SWEETLAND CREEK GOLD MINES.—A telegram just received by the directors from their agent advises them of a net profit of 1200l. on the last 28 days' clean up, although operations had been impeded by frost. With the balance already in hand, this remittance will enable them to announce another lucrative dividend, a circumstance which, together with the dividends previously declared, the fact that the mines are not worked to their full capacity, and that the available resources are understood to be of a very enduring character, must be extremely satisfactory to the shareholders.

HAREWOOD CONSOLS.—I should be glad if Capt. Neill would inform us of the cost of one of those puffing engines (as I find they have to pay 5l. per month for the use of it), and what quantity of coal it monthly consumed? Whatever the indications may be, borrowing an engine under such conditions must cripple the mine.

FEON-AN-DREA.—Amethystine flour-spar—massive, not crystallised, as is the "Blue John" of Derbyshire—is found in Pold-an-drea, Redruth. NANGLES is on the same lode as Wheal Jane, and may prove as rich a mine. Nangles shares can now be bought for 1l. each. Wheal Jane shares were 35s. to 40s. each in 1857—now 52l., and paying 9l. per share yearly in dividends.

DOLVEN.—We are advised that the discovery noticed last week continues to develop itself most satisfactorily. The agent, in writing to the managing director (Mr. Balmombe), for the special meeting, held in London, on Thursday, says:—"You may depend upon it we are yet only at the heel of a large body of lead ore."

WEST ESKAIR LLE.—The unanimous opinion of the mining engineers who have examined this property having been that increased machinery was alone requisite to place the company in a paying position, the directors have wisely contracted for the purchase of the necessary machinery for the purpose. Within the past few days every thing has been arranged for the erection of all that was required, and it is expected that within the next two months the whole of the erections will be completed, and returns will then be made which will leave a good profit to the shareholders. There are large quantities of ore already in sight which can be turned to advantage by economy of working. This last step of the board will consummate the desired object.

WHEAL UNY.—The work points in operation are in the aggregate worth 125l. per fathom. The sales of tin for January amounted to 23 tons 13 cwt. 2 qrs. 19 lbs., producing 2189l. 18s., against the month's cost of 1692l. 15s. 6d., leaving a very handsome profit. The tin at this mine is sold by tender, which to this time has proved greatly to the advantage of the adventurers. This tin mine seems from the present market price not to have received that attention which it deserves, for we understand that at the next quarterly meeting a dividend of 1000l. will in all probability be declared, and a good balance carried over. Yet the whole mine is selling for less than 20,000l.

EXMOUTH (Silver-lead).—It must be very pleasing to the shareholders to learn that this mine is opening out well, and that ere long it is expected it will rank with the dividend-paying mines.

EAST LLANYNOG.—A successful company has been recently formed for the development of this valuable property. Rocks of lead of considerable weight are being broken from the different lodes, which are of great magnitude, and the parcels of lead are already being prepared for the market, and the adventurers are anticipating early dividends, which will give life and vitality to the mines of the district.

VAN CONSOLS.—This property has doubled in market value, on an official report that the lode—'which is the Van lode—is yielding stones of lead. It is also officially stated as of vital importance to the company that a grant or tack-nore has been secured of the adjoining ground on the south-east, into which the Van lode underlies, so that the company can now work in this part without let or hindrance.

TREVARRACK.—Captain James Pope (late of Basset) has recently been appointed manager of this mine, and reports most favourably of its prospects. It appears to be the prevailing opinion that the lode upon which they are sinking and which is holding out such good prospects, is the Trevarren lode, and there is not the slightest reason to doubt that the shareholders who have prosecuted this mine with so much vigour and ability will be amply rewarded for their outlay.

WHEAL RUSSELL is still looking exceedingly well. They have ready for sale 363 tons of rich ore, and from present appearance, with large reserves, many large dividends may, therefore, be anticipated.

WEST PRINCE OF WALES is preparing for active operation by putting in a large boiler, which ought to have been done long ago; if so, a heavy expenditure would have been saved, and no doubt the mine would have sold large quantities of tin. This is a fine set, but has been sadly neglected through bad management.

At Old Wheal Betsy they are making preparations for putting in a 60-hp steam-engine. Had this been done some years since no doubt the mine would have paid dividends, as they have been subjected to such severe changes of weather that the bottom of the mine is hardly ever seen.

FOREIGN MINES.

SWEETLAND CREEK (Gold).—The directors have received from their manager the following telegram:—"We have cleaned up after a run of forty-two days. Gross return, \$15,500 (27000); the profit is \$600 (12000). I send a remittance of \$6000 (12000), the result of twenty-eight days' washing."

NEW ZEALAND (Quartz Crushing and Gold).—J. Thomas writes (Dec. 6) that the whole of the machinery is now in splendid working order, consisting of 15 stampers, and the single specimen stamper. He has pegged out four men's ground, and got four miners' rights for their three men and himself, and had the claim duly registered. He has secured an abandoned claim for the company. They can secure as much ore as they want that will pay to crush for 2s. per ton. A sample lot of 8 tons 16 cwt. yields 4 ozs. 3 dwts. of gold, worth 52s. 6d. per oz. The crushing costs 15s. per ton, in addition to which the company obtains a net profit of 7d. per ton. The company's machinery and prospects are in a fair way of doing good, more especially after the Government tramway is in good working order.

BRAZANZA (Gold).—The letters received on Feb. 4 were delayed at Rio, through the sudden death of Mr. Jordan Crewse. Capt. Roberts's reports, dated 20th, 21st, and 22nd, state that on receipt of orders all except the winze men were sent on the water-courses. They had completed 2500 fathoms as well as the dam for the same, although washed away once with other landfalls. He agreed with all hands to distribute a bullock amongst them if they could bring the water to the Itabera road by Christmas. The water was running beautifully by Dec. 22; the bullock cost \$12 (4l.). The carpenters would come in from the regio at the commencement of the year, and immediately all hands would commence about the stamps. The Englishmen's house is finished, and Mr. Tobias is beginning to look like a little village.

RHINE.—J. Garland, Feb. 1: Schmelzer: The cross-cut, east of Henty's shaft, was driven during the past month 3 fms. 4 ft. through hard grauwacke. We have not yet intersected the Schmelzer lode; we must be very near it, however, if the lode has the strike imputed to it. The present distance from engine-shaft is 9½ fms. The end has been re-set for six men for 2 fathoms, or cut the lode, at 35 shalers per fathom, about 4l. 10s. per fathom. On the Tontl lode progress has been slow during the last fortnight, owing to the large quantity of water letting down from the lode; the lode itself being very loose, and thoroughly disintegrated. Drilling has been suspended for the present, and until we have communicated with the level above, the old 1½ fm. level, by a rise; there is about 1½ to 2 fms. of ground to rise through. Marienfreude, Adit Level: The north-east level on the lode was driven about 2 fms. in January; no important change has occurred in the lode. As we shall be ready to resume sinking the winze on this lode in a few days, we shall take the men from the end to sink the winze, suspending all driving on the lode until we have seen its character some 7 or 8 fms. deeper. Adit Level: The adit level was driven east last month 6 fms. 5 ft.; it is now being driven by two men and two boys, at 9 shalers per fathom, 23s. 6d. per fathom.

—J. Garland, Feb. 7: The ground in Henty's cross-cut has a little improved. Four men have commenced to rise on the Tontl lode, and we hope soon to communicate with the level above. We have the hand-pump for Marienfreude winze, and shall resume sinking with a full pair of men forthwith. The weather has much improved for surface operations, and we shall proceed with the preparations for the new pitwork, which is promised very shortly, as far as possible.

ALMILLOS.—Feb. 1: The lode in the 60, west of San Rafael shaft, is large, and yielding very good stones of ore. In the 50, west of San Martin, the ground is very hard for driving, and the lode small. The men are getting on very badly in the 50, east of La Magdalena shaft, and the lode quite unproductive. The lode has failed in the last few days in the 75, east of Taylor's engine-shaft; and in the same level west the lode is disarranged by a strong joint crossing the end. In the 50, west of San Yago shaft, the lode is open, and of a kindly appearance. The 30, east of San Victor shaft, is passing through a good run of tribolite ground, yielding 2 tons per fathom. The lode is small and poor at present in the 20, driving east of San Carlos shaft. In the 25, east of Adit's, the lode yields 2 tons per fathom, and is very compact and regular. The 20, west of this shaft, has opened excellent ground until the last few days. The lode is strong, regular, and of a very promising appearance in the 40, east of Crosby's shaft, where it produces 2 tons per fathom. In the 40, west of Crosby's cross-cut, the lode is improving, and now yields 1 ton per fathom. In the 20, east of Swaffield's shaft, the lode is small and irregular, yielding ½ ton per fathom; and in the 30 west the lode has changed unfavourably in the last few days, and now yields ½ ton per fathom. Shafts and Winzes: The men are getting on rather slowly with Taylor's engine-shaft sinking below the 75, and the ground is very hard for sinking

CROWNED AND WHEEL ABRAHAM UNITED.—Wm. Kitto, W. J. Paul, Feb. 7: Sturt's and Pelly's Engine-Shafts: The sumpten in both shafts are engaged in carrying out the contracts as reported in our last, with all the dispatch possible. There is no change in any of our tutwork operations worthy of re-

the adit level producing ton of lead ore per fathom. A stope over the same level (and east from the last-mentioned stope) to four men, at 2 $\frac{1}{2}$ lbs. per fm.; lode yielding 1 ton of lead ore per fathom. The adit level to drive east by four men, at 2 $\frac{1}{2}$ lbs. per fathom; for the last 6 feet the lode has been rather disordered by faulting, and the rate of production is not so good as to be expected. It will again improve again, and give its usual average of lead ore. A stope is let to four men in bottom of the adit level, and east from No. 5 winze, at 2 $\frac{1}{2}$ lbs. per fathom; the lode worth $\frac{1}{4}$ ton of lead ore per fathom. A stope below this level, and west of the said winze, to six men, at 3 $\frac{1}{2}$ lbs. per fathom. A stope below the last level, and west of the said winze, to four men, at 2 $\frac{1}{2}$ lbs. per fathom; lode worth 15 cwt. of ore per fathom; also a stope in back of the adit, east of No. 3 winze, at 2 $\frac{1}{2}$ lbs.

stored in any suitable receptacle a convenient quantity of an hydrocarbon liquid, and, suitably disposed, a quantity of a substance, such as Mr. W. Aspin, Homerton, prefers to use, hydrocarbon liquid obtained from shale, from this receptacle the hydrocarbon liquid is conveyed in suitable quantities to the explosion chamber, either by suitable contrivance or means into an air-tight generating chamber, and either on its road there or when in the chamber is generated or converted into carbonated hydrogen gas by the application of heat. This gas is then let or forced out of the said generating chamber and conveyed by a pipe or other suitable contrivance or means to an explosion chamber, which is made very strong, and of any suitable size and material; and either on its road to the said explosion chamber or when there the said gas is mixed by a fan or other suitable contrivance or means with a convenient quantity of atmospheric air or of pure oxygen gas, and as much as the said carbonated hydrogen gas is mixed with pure oxygen gas, as the case may be, which has been introduced are mixed in the explosion chamber, and ignition takes place through the medium of an electric spark or other suitable contrivance or means, and an immediate explosion ensues, which by being made to act on a piston, or by other suitable contrivance or means, forms a volume of atmospheric air into an air-tight reservoir or chamber, and thus!

The market for Mine Shares on the Stock Exchange has been moderately active during the week, a considerable amount of business transacted, and prices have been fairly maintained. The demand for Sweetland Creek, Eberhardt, Van, Tankerville, and Roman Gravel shares has been kept up. To-day the allotment has been made in the shares of the Birdseye Creek (Gold); this company has been successfully launched, and appears to bid fair to have a successful future; dividends will be paid forthwith, and with an assured prospect of being maintained for many years. The agent of the company sails to-morrow. The management is under the auspices of the Sweetland Creek Company. Eberhardt shares have advanced to 15½, 16; an important telegram has been received, to the effect that the small mill has yielded a profit of \$20,000 on the month's working. Sweetland Creek, 4 to 4½; a cable message has been received, announcing that a profit remittance for a run of 28 days had been sent forward of 19007, and that there was stuff already broken to keep the works

going for two months, and that the prospects are very good. Taquaril shares are firmer, anticipating favourable advices by the next mail; 1½ to 1½ prem. Van, 55 to 57; an important discovery has been made in the 30 fm. level east, and the discovery in the 15 and in the adit east, a great distance in advance of the 30, demonstrates an entirely new mine in this direction. The western levels continue to prove increasingly rich, and the general condition of the mine is most satisfactory, and for permanence is without a parallel: 430 tons of lead for the month has realised 12½, 11s. 6d. per ton, and there are 1000 tons broken. Great Laxey, 17½ to 18; West Chiverton shares are flatter, at 44 to 46. Tin mine shares are steady. Great Wheel Lovell, 1½ to 1½; the lode in the shaft sinking below the 15 is worth 25s. per fathom; and the 15 west, 18s. per fathom; the mine is promising. East Lovell shares are flatter; Great Wheel Vor shares, missing. East Lovell shares are flatter. Tankerville, 12½ to 13, ex div; the report sets forth developments of a favourable character. Roman Gravel, 9½ to 10; since the agents of the Van and Tankerville Mines inspected this property an improvement has taken place in the 65 north, now worth 8 tons per fathom, and the 65 south upwards of 8 tons of lead ore per fathom, and a winze in advance of the latter end is reported of equal richness. Subjoined are the closing quotations:—Asheton, 4½ to 4½; Tan-yr-Alit, 1 to 1½; Devon Great Consols, 95 to 105; East Caradon, 5½ to 5½; East Grenville, 2½ to 3; East Lovell, 31 to 32; Great Wheel Vor, 5½ to 5½; Marke Valley, 6½ to 7½; Prince of Wales, 33s. to 35s.; Tankerville, 12½ to 13; Tincroft, 48 to 50; Almada, 3 to 3½; Cape Copper, 9 to 10 prem.; Chontales, 3 to 3½; Eclipse, 3 to 3½ prem.; Frontino, 1½ to 1½; General Brazilian, 3 dis. to 3½ prem.; Pacific, 1½ to 1½; St. John del Rey, 22 to 23; Yudanumutana, 1½ to 1½; Van Consols, 2½ to 3½; Roman Gravel, 9½ to 9½.

The GLASGOW AND CAPE BRETON (NOVA SCOTIA) COAL AND RAILWAY COMPANY, with a capital of 100,000, in shares of 10s. each, has been incorporated for the purpose of availing of a valuable and important concession granted by Act of the Nova Scotia Legislature. The line of railway to be constructed will extend from Sydney to Cow Bay, via Bridgeport, in the island of Cape Breton; and for the construction of the line the Legislature offer as bonus a lease, for 78 years, of a square mile of coal field. The purchase-money is fixed at 10,000, half of which is payable in cash, and the remainder in fully paid shares, and the vendors also receive one fourth of all profits after 10 per cent. has been paid as dividends to the shareholders. The length of the line will be 21 miles, and a 3-foot gauge will be adopted; it will pass through some of the most valuable coal fields of the Cape Breton district, the collieries in which can at present only export in the summer, owing to the shipments being made from a timber-constructed pier, 400 feet long, which is washed away every season. The new line will permit of shipment at the excellent landlocked harbour of Sydney, where, during an interval of ten months out of the whole year, no interruptions whatever will be met with. The collieries to be wrought by the company have excellent seams of coal, one from 7 ft. to 8 ft. thick, and the working of them is estimated to yield a profit of 3s. per ton. As the existence of the line will facilitate the opening up of new collieries, it is confidently anticipated that the net revenue (at present estimated as equal to about 34 per cent. on the capital) will constantly increase.

In this day's Mining Journal the prospectus of the HARLECH LEAD AND SULPHUR MINING COMPANY appears. The property constituting the basis of the undertaking presents some unusual features, as the late workers absolutely declined removing or utilising what portion of the more valuable ores they were necessitated to raise in the prosecution of the mine for, what was to them, the all-engrossing subject of their search and endeavours. It appears that a firm of manufacturing chemists of high standing obtained possession of the set, and worked it for some years for the sulphur ore only, which they found so fine and admirably adapted for certain chemical purposes that they excluded all other mineral, however cheap or obtainable. The gangue of the lode was known to be rich in other minerals, and that lead ore existed in the vein. Some hundreds of tons of this, to them, refuse is on the bank, and the work already done has been, in fact, the desuing the great lode for the new company. It is proposed to bring the most approved machinery into action, and to work the lodes with vigour. Since the property has been in the possession of the promoters the fact of lead in large quantities being in the lode has been definitively ascertained. The mining engineer employed desired certain works to be carried out, as he felt confident from appearances that a good vein of lead would be met with; two weeks subsequently his predictions were verified. The affair is one of more than ordinary promise. The prospectus and reports are well worth reading by all parties interested in legitimate mining. The partners of the deceased proprietor take a large interest, and a great number of shares have been taken up. The mine has been a profitable concern from the commencement, and the fact of being able to raise and sell an unlimited quantity of sulphur, as well as to stop the lead and other ores forthwith, will enable further and regular dividends to be resumed as soon as the machinery is completed to effect the improved system of manipulation.

At the Swansea Ticketing, on Tuesday, 1953 tons of ore were sold, realising 22,567. 7s. 6d. The particulars of the sale were:—Average standard for 9 per cent. produce, 86½. 7s. 6d.; average produce, 17½; average price per ton, 11½. 8s.; quantity of fine copper, 346 tons 13 cwt. The following are the particulars of the last two sales:—
Date. Tons. Standard. Produce. Price per ton. Per cent. Ore per cent.
Jan. 8. 3314 17½ £11 2 4 12s. 7d. £22 18 0
Feb. 7. 1953 86 7 6 17½ 11 8 0 12 10 64 3 0
Compared with the last sale, the advance has been in the standard 11½. 6d., and in the price per ton of ore about 5s. 6d. There will be no sale on Feb. 28.

At Penhalls Mine meeting, yesterday (Mr. W. Goslett in the chair), the accounts showed a credit balance of 8677. 17s. 4d. A dividend of 3s. per share was declared. The agent reported that the returns would be greater in the coming quarter.

At South Ward Mine meeting, on Thursday (Mr. R. McCallan in the chair) the accounts showed a cash balance of 112. 18s. 4d., and a balance of liabilities over assets of 6427. 9s. 10d. A call of 2s. 6d. per share was made. Capt. Thomas Foote reported that he was more confident than ever of the mine proving very successful.

At Bedford Consols Mine meeting, on Tuesday, the accounts showed a debit balance of 228. 6s. 3d. A call of 2s. 6d. per share was made, and the agent's report, which was considered very satisfactory, adopted.

At the Gilfach Silver-Lead Mining Company first general meeting, held at the London Tavern, on Wednesday (Mr. Robert William Billings in the chair), a statement of the position, progress, and prospects of the mine was submitted, and regarded as highly satisfactory. The directors explained the measures they had adopted to secure efficient control over the contractors and the general management of the mine, superintendence of which has been entrusted for the present to Capt. Kitto, of Llanidloes. The prospects of the mine are considered by competent judges, who have personally inspected the property, as in every respect very encouraging.

At Frank Mills Mine meeting on Tuesday (Mr. W. T. Smith in the chair), the accounts were read, but the balance is not stated. A letter from Mr. Adam Murray states that irrespective of the falling off in the sampling the mine is in a fair and sound condition. The important points are the 100, 115, 120, and 145, the three last having run into the same congealed matrix as that met with in the 100. There is another point of importance in the 72 and 45 north, on the west lode, in hitherto undiscovered ground. Captains J. and F. Cornish and Addams report the machinery in good order, and working efficiently, and the mine throughout in good working condition. They have 190 persons employed.

At New Gwynfynydd Gold Mining Company meeting (Mr. W. R. Collett in the chair) the accounts to Dec. 21 were submitted and adopted. The directors' report stated that shortly after the erection of the mill the stamp boxes were found to be very defective, and several months elapsed before proper cast-iron boxes could be substituted to retain the coarser particles of gold. From 460 tons of quartz 161 ozs. of gold have been extracted, being at the rate of 7 dwts. per ton. The directors decided on laying a tramway with two inclines from the main lode to the mill, and it is calculated that the maximum cost of carriage of a ton of quartz will be less than 1s. The erection of greater stamping power now only remains to be carried out, and a proper stone-breaker is required. Of the inexhaustibility of the quartz, and the magnificent water-power from the never-falling rivers Cain and Mawddach, there can be no question. Every assay bears its own testimony to the auriferous nature of the lode, and the efficiency of the process employed in extracting the gold speaks for itself in the result obtained, and from the absence of any appreciable gold in the tailings.

At Rose and Chiverton United Silver-Lead Mining Company annual meeting, held at the company's offices, Bishopsgate, on Wednesday (Mr. John Morkill in the chair), a good number of shareholders were present in person and by proxy. The directors, who had visited the property, gave a detailed statement as to the progress of the works, and their report was considered by the far most satisfactory which had ever been delivered to the proprietors. The balance-sheet was unanimously passed, and the proceedings throughout were characterised by the greatest unanimity. The directors reported the resignation of Capt. James Evans, of St. Agnes, and the appointment of Capt. Samuel

Mitchell, of New Treleigh, as his successor. It is expected that the lode in the 45 fm. level will be out in about four months, and it is confidently anticipated that this will turn out to be one of the richest lead mines in Cornwall. A vote of thanks was passed to the directors for their very able management of the company's affairs, and those who retired by rotation, as also the auditor, were re-elected. A vote of thanks to the Chairman terminated the proceedings.

At South Merilyn Mining Company meeting, on Monday, the balance-sheet to Jan. 13 was presented. After charging all costs to the latest date, the cash in hand amounted to 1687. 6s. 5d., without a liability, and not including ore broken. The agent, in his report, directs attention to the western lode, which he expects will be out next month; and also thinks well of the discovery in the 90 yard level, the appearance of the lode justifying him in anticipating increased yield with depth, enabling larger profits to be made. Votes of thanks were accorded to the secretary and directors, for the economical management which had been exercised.

The Bank of England return for the week ending on Wednesday evening showed in the ISSUE DEPARTMENT a decrease in the "notes issued" of 201,345, which is represented by a corresponding decrease in the "coin and bullion" on the other side of the account. In the BANKING DEPARTMENT there was shown an increase in the "public deposits" of 1,331,821; and in the "rest" of 12,650; together, 1,344,471; a decrease in the "other deposits" of 71,882; and in the "seven day and other bills" of 13,222; together, 735,104;—699,373. On the asset side there was a decrease in the "Government securities" of 10,658; and in the "other securities" of 299,741;—390,400, leaving an increase in the total reserve of 229,297.

COAL MARKET.—The market has been very barely supplied this week with household coal, only 80 vessels having come forward, and a clearance was effected at an advance of 6d. per ton. Hartleys were a full supply, but the demand was active, and prices are 3d. higher. Hetton Wallsend, 19s. 6d.; Haswell Wallsend, 19s.; South Hetton Wallsend, 19s.; Heugh Hall Wallsend, 17s. 9d.; South Hartlepool Wallsend, 17s. 6d.; Tunstall Wallsend, 16s. 3d.; Hawthorn Wallsend, 16s. Unsold, nil; 150 ships at sea.

MINES REGULATION.—TRADES UNIONS.—In the House of Commons, on Thursday, Mr. Bruce gave notice that on Monday next he should ask leave to bring in a Bill to consolidate and amend the Acts relating to the Regulation of Mines; and on Tuesday a Bill to amend the law relating to Trades Unions.

BRONFLOYD, LLYWERNOG, AND DOLWEN.—The necessary second meeting, in accordance with Section 51 of the Companies Act, was in each case held at the Victoria Hotel, Euston, on Thursday, when the special resolutions curtailing the meetings to half-yearly ones, in January and July, passed by the above-named companies on Jan. 25, were unanimously confirmed and ratified.

ENGLISH RAILS FOR HOLLAND.—Messrs. Bolekov, Vaughan, and Co., of Middlesbrough, have obtained a contract for 3000 tons of rails for the Dutch State railways.

COAL MINING ENTERPRISE AND MANAGEMENT.

WANTED, a MANAGER and GENERAL SUPERINTENDENT over EXTENSIVE COLLIERIES and TRADE OPERATIONS in connection therewith. For responsibility, for experience in the Get and Vend of Coal, for high personal character and conduct, very liberal remuneration will be given.

In strict confidence, address "G. P." care of Mr. G. Street, 20, Cornhill, London, giving full particulars of career and qualifications. If preferred, in the first instance initials only may be given, with the address of the writer.

MANAGER WANTED FOR LEAD MINES ABROAD, extending over 10,000 acres of land. Must be experienced and fully competent to TAKE CHARGE OF THE OPENING AND WORKING OF THE MINES, the CLEANING AND SMELTING OF THE ORE, &c. A liberal salary, and also a share in the profits, will be given to a competent party.

Apply, in first instance, with certificates and testimonials, to "B. W." care of Henry Greenwood, Advertising Agent, Liverpool.

WHEEL OSBORNE.

WANTED, a ROTARY ENGINE, from 26 to 30 in. cylinder, adapted for PUMPING, WINDING, AND STAMPING. Apply to Mr. CHARLES CARKEE, Camborne; or to Messrs. JOHN HOCKING and SON, Engineers, Redruth.

PUMPS.

WANTED, a FIRST-CLASS LIFT OF PUMPS, 200 yards long, of from 12 to 14 inch working barrels, including T beams and all other necessary fittings, but they must be in good condition. Particulars, with lowest price, may be sent to Mr. HENRY JOHNSON, Mining Engineer, Trindle-row, Dudley, Worcester-shire.

WANTED, a 24 in. to 30 in. ENGINE, in first-class condition, and with FLY-WHEEL. Apply to THOMAS THOMPSON, Jun., 5, Whitehall, London, S.W.

MINER'S DIAL AND QUADRANT WANTED.—One of Rule's preferred. Must be in good condition, and thorough working order. No answer will be considered unless price is named. Reply, by letter, to F. R. CLARKE, 7, Beaumont-street, Mile End-road, London.

TO CAPITALISTS.

SIX THOUSAND POUNDS, if judiciously laid out, WILL PURCHASE AND PLACE IN A STATE OF PROFIT THREE LARGE MINES, all furnished with MACHINERY FOR PUMPING, DRAWING, &c., and capable of returning from 100 to 200 tons of ore per month. For particulars, apply to Capt. FRANCIS, Goginan, Aberystwith. Goginan, 8th February, 1871.

TO CAPITALISTS.

FOR SALE, A GOOD TIN AND CLAY SETT.—The tin lode is rich and well-defined. There is a large quantity of good clay in the sett, on which the lode's dues and carriage are very low. For particulars, apply to Mr. T. HITCHINS, Jun., Merchant, St. Austell; or to Mr. T. PEARCE, Trenevassick, Par Station.

FOR SALE, in consequence of the death of the late proprietor, a SILVER-LEAD AND BLENDE MINE, in FIRST-RATE POSITION, situated on the RHINE, and from which for years past large profits have been realised. At present in full work, and provided with complete machinery and working staff. Address, S. GRAY, Mining and Civil Engineer, Cologne, Prussia.

FOR SALE, IN ONE LOT, for £485, or separately each:—3 West Chiverton, £44 10s.; 10 Rosewall Hill, 28s. 6d.; 10 Van Consols, £32; 20 Drake Walls, 20s.; 20 Prince of Wales, 24s. 6d.; 25 East Seton, 23s.; 20 South Caradon, 12s. 6d.; 5 North Crofty, £7 10s.; 100 South Van, 10s.; 25 Terras Tin, 30s.; 5 Penhalls, £5 5s.; 1 Bassett, £67 10s. Address, Mr. HUNT, 33, Finsbury-place, London, E.C.

FOR SALE, TEN QUEEN MINE (Silver and Copper) SHARES at £2. This mine has the same lodes with the Prince of Wales, and has paid two dividends in six months, while the latter has paid none. Apply to "A. B.," 84, Alexandra-terrace, Newport, Isle of Wight.

TANKERVILLE MINING COMPANY (LIMITED).

The Directors have DECLARED A DIVIDEND OF FOUR SHILLINGS PER SHARE, free of income tax, payable on the 15th February instant. The Transfer Books of the company will be closed from the 11th to the 16th instant, both days inclusive, for the preparation of the Dividend List.

By order of the Board,

J. H. MURCHISON, London Manager.

THE VAN MINING COMPANY (LIMITED).—Notice is hereby given, that the HALF-YEARLY GENERAL MEETING of the shareholders in this company will be HELD at their offices, 9, Union-cour, Old Broad-street, London, on TUESDAY, the 28th instant, at One o'clock precisely.

The Transfer Books will be closed from the 21st instant until after the meeting. February 10, 1871.

By Order, W. J. LAVINGTON, Secretary.

BRONFLOYD COMPANY (LIMITED).—Notice is hereby given, that the SPECIAL RESOLUTIONS for holding henceforward HALF-YEARLY instead of QUARTERLY MEETINGS, adopted at the Annual General Meeting of the members of this company, held on the 25th ultimo, were UNANIMOUSLY CONFIRMED AND RATIFIED at an EXTRAORDINARY GENERAL MEETING of the company, duly convened and held this day at the Victoria Hotel, Euston, London.

J. B. BALCOMBE, Managing Director.

Dated this 9th day of February, 1871. NOTE.—Copies of the Articles of Association of the company, having attached four lithographed drawings of the surface and sectional plans of the mine, may be had from me on and after the 15th instant, at 2s. per copy.

EL CHICO SILVER MINING AND REDUCTION COMPANY (LIMITED).

No. 2, Coleman-street-buildings, Moorgate-street, Great Swan-alley, E.C., 10th February, 1871.

Notice is hereby given, that a GENERAL MEETING of the shareholders of this company will be HELD at the above offices, on WEDNESDAY, the 22nd day of February instant, at Two o'clock precisely.

By order of the Board,

T. W. YOUNGHUSBAND, Secretary (pro tem).

THE COLORADO TERRIBLE LODE MINING COMPANY (LIMITED).

The Directors have this day DECLARED AN AD INTERIM DIVIDEND OF TWO SHILLINGS PER SHARE, payable on and after 1st March next. Notice is hereby given that the Transfer Books of the company will be closed from the 20th inst. to 1st March inclusive.

By order of the Board,

F. ANDREWS, Secretary.

2, Winchester-buildings, February 10, 1871.

THE LONDON AND PROVINCIAL INVESTORS' SHARE EXCHANGE (POWELL, DIXON, AND CO.), 28, CHANGE ALLEY, LOMBARD STREET, LONDON, E.C., BUY and SELL every description of Stocks and Shares at close market prices net. Investors and capitalists should read the "Share Exchange Times," published by P. D. and Co. at the above offices. It contains special information upon Van, Tincroft, and other leading mines.

Twenty-six Years' Experience.

MR. F. W. MANSELL, STOCK AND SHAREDEALER, 1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C. Daily List of closing prices in British and Foreign mines published every evening, and forwarded to correspondents (free). References exchanged. Bankers: London Joint-Stock Bank.

MR. C. A. POWELL, BRITISH AND FOREIGN STOCK AND SHAREDEALER, No. 1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C.

Business transacted in every description of negotiable security at current market prices, net.

SPECIAL BUSINESS in Prices of Wales, Frontino, Sweetland Creek, South Condurow, Van, Taquaril, Eberhardt, and New Great Consols, &c. GREAT ROYALTON.—The advertiser is prepared to treat on favourable terms with parties having business in these shares.

Price List on application. References exchanged.

Bankers: City Bank, Finsbury-lane, E.C.

T. R. COMYN, STOCK AND SHAREDEALER, 31, THREADNEEDLE STREET, LONDON, E.C.

Investors in mines will do well to apply to Mr. COMYN for shares in WEST JEWELL and EXCELSIOR TIN, and HARDWOOD CONSOLS COPPER, MINES. He has business in these shares at such prices as must leave a very large profit either for sale hereafter or for investment.

Every description of Stocks and Shares dealt in. References given. Bankers: National Provincial Bank of England, E.C.

MR. JAMES STOCKER, 2, CROWN COURT, THREADNEEDLE STREET, AND MINING EXCHANGE. Business in all Stocks and Shares for cash or account. Established Twenty Years.

Taquaril Gold, 25s., 26s. prem.	Carn Brea, £41, £43.	St. Laxey, £17½, £18.
Prince of Wales, 33s. 35s.	Great Vor, £5½, £5½.	S. Condurow, £2½, £2½.
West Chiverton, £54½, £55½.	Tankerville, £12½, £13.	Tincroft, £49, £50.
	Van Consols, £24, £23.	Roman Gravel, £9, £9½.
	East Lovell, £31½, £32.	

Bankers: London and Westminster, Lothbury.

NOTICE.

INVESTORS' GUIDE should be consulted by all Capitalists seeking SAFE AND PROFITABLE INVESTMENTS. INVESTORS' GUIDE contains the most reliable information relative to Mining, Banking, Railway, Insurance, Dock, Hotel, and other Companies.

FEBRUARY Number (now ready) contains the particulars of a WELSH LEAD MINE lately introduced to the public, and which will soon become, without exception, THE RICHEST MINE IN WALES. Shares, which can now be purchased at £2 10s., will very soon be worth at least £20.

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THE UNDERSIGNED TRANSACT BUSINESS AT DEALING PRICES, net, in the following (others not named, BOUGHT or SOLD, if practicable):—

Asheton.	Kitty (St. Agnes).	Spearn Moor.
Bronfloyd.	Marke Valley.	Tincroft.
Cook's Kitchen.	Margaret.	Tankerville.
Carn Camborne.	North Crofty.	Terras Tin.
Dulcoath.	New Lovell.	Van Consols.
Drake Walls.	Penhalls.	West Chiverton.
Don Penhalls.	Penhalls.	West Frances.
East Lovell.	Penhalls.	West Tankerville.
East Basset.	Prince of Wales.	West Seton.
East Seton.	Prinnylmon.	West Pant-y-Go.
East Caradon.	Perran Virgin.	Wheal Seal.
Kellipse.	Rosewall Hill.	Wheal Uny.
Great Lovell.	Roman Gravel.	Wheal Agar.
General Brazilian.	South Frances.	Wheal Jane.
	Sweetland Creek.	Wheal Crobar.

Parties enquiring state number, when all communications will meet prompt attention.

JAMES BRENCHELY, 32, Nicholas-lane, Lombard-street, London, and Mining Exchange (Established Eighteen Years).

GRATIS—FORWARDED ON APPLICATION.

A TABULAR STATEMENT OF DAYS OF MEETING OF THE PRINCIPAL MINES DEALT IN ON THE LONDON MARKET. A useful reference to investors and purchasers. JAMES BRENCHELY, 32, Nicholas-lane, Lombard-street, London.

OFFERS WANTED FOR.—10 Pestarena United, 50 Anglo-Brazilian, 10 East Seton, 5 Eberhardt, 2 Anglo-Australian, 10 General Brazilian.

BUDNICK CONSOLS.—Fifty shares for sale at 10s. each. Country clients' business promptly attended to at best prices. Address, FREDERICK HOSNOUT, 65, Davies-street, Oxford-street, London, W.

MR. R. HUGO, MINE SHAREDEALER, CAMBORNE, CORNWALL.

Twenty-five Years' Experience.—Bankers: Miners' Bank, Camborne. FOR SALE:—20 Carn Camborne, 39s.; 20 East Seton, 25s.; 20 South Condurow, £5½; and 5 Cook's Kitchen, £20.

BENJAMIN LIBBY, MINE AND SHAREDEALER, CAMBORNE, CORNWALL.

The following MINES should be BOUGHT AT ONCE FOR INVESTMENT, and will sell the number at prices affixed:—
10 Rosewall Hill, 28s. 6d. per share. 10 South Condurow, £5½ per share.
10 Carn Camborne, 39s. per share. 5 Cook's Kitchen, £19½ per share.
10 North Crofty, £24½ per share. 2 Tincroft, £49 per share.
20 East Seton, 25s. per share. 2 Margaret, £9½ per share.

THE VIRTUOUS LADY MINE is now working lodes (Tin and Copper) worth from EIGHTY to ONE HUNDRED POUNDS per fathom. No expense for steam; water-power inexhaustible. Speedy and immense profits are looked for.

A FEW SHARES FOR SALE.

Apply to Mr. A. SNOW, 88, Alexandra-terrace, Newport, Isle of Wight.

In Chancery.

IN THE MATTER OF THE COMPANIES ACTS, 1862 AND 1867; AND IN THE MATTER OF THE HIRWAIN COAL AND IRON COMPANY (LIMITED).

THE CREDITORS OF THE ABOVE-NAMED COMPANY are REQUIRED, on or before the 25th day of February, 1871, TO SEND THEIR NAMES AND ADDRESSES, AND THE PARTICULARS OF THEIR DEBTS OR CLAIMS, AND THE NAMES AND ADDRESSES OF THEIR SOLICITORS, if any, to ROBERT ALLAN McLEAN, of No. 3, Lothbury, in the City of London, Public Accountant, the Official Liquidator of the said company, and, if so required by notice in writing from the said Official Liquidator, are, by their solicitors, to COME IN AND PROVE THEIR SAID DEBTS OR CLAIMS at the Chambers of the Master of the Rolls, in the Rolls-yard, Chancery-lane, in the county of Middlesex, at such time as shall be specified in such notice; or, in default thereof, they will be EXCLUDED from the BENEFIT of any DISTRIBUTION made before such debts are proved.

Saturday, the 25th day of March, 1871, at Twelve o'clock at noon, at the said chambers, is appointed for hearing and adjudicating upon the debts and claims.

JOHN WM. HAWKINS, Chief Clerk.

VALLANCE AND VALLANCE, 20, Essex-street, Strand, London.

(Agents for Press and Inskip, of Bristol).

Dated this 1st day of February, 1871.

LEAD ORES				
Date.	Mines.	Tons.	Price per ton.	Purchasers.
Feb. 2—	Great Laxey	100	£21 13 6	Trefry's Trustees.
3—	Minera	100	11 9 6	P. Glover.
—	ditto	83	11 5 0	Sims, Williams, & Co.
—	ditto	40	11 5 0	Walker, Parker, & Co.
—	ditto	65	11 6 6	A. Kyton.
—	ditto	45	11 6 6	ditto
—	Yardale	100	13 6 0	Sheldon, Bush, & Co.
7—	Mac-y-Safn	80	11 6 0	Deffield Company.
—	Dyllid	80	11 6 0	Walker, Parker, & Co.
9—	Van	430	12 11 6	ditto
—	Talargoch	39	12 3 6	ditto
—	ditto	112	13 1 0	ditto
—	Trelogan	40	10 12 6	Adam Eytton.
—	Holywell Level	12	11 4 0	Walker, Parker, & Co.
—	Gludod	11	11 3 6	Adam Eytton.
—	Bwlchylwyn	2½	6 6	ditto
—	ditto	2½	11 6 6	Walker, Parker, & Co.

BLENDE.				
Date.	Mine.	Tons.	Price per ton.	Purchasers.
Feb. 3—	Minera	72	£ 4 3 6	Bagillt Company.
—	ditto	32	3 7 6	Kenrick and Son.
—	ditto	45	3 8 6	Bagillt Company.
—	ditto	15	3 6 6	Kenrick and Son.

CIVIL ENGINEER'S PRICE BOOK, 1871.

Now ready, demy 8vo., with Three Plates and numerous Woodcuts, cloth, price 6s., postage 5d.

THE CIVIL ENGINEER'S AND CONTRACTOR'S ESTIMATE AND PRICE BOOK (Archley's) FOR 1871. with Specifications for Permanent Way, for Telegraph Materials, and for Works, Plant, Maintenance, and Working of a Railway; and an Alphabetical Priced List of Machinery, Plant, Tools, and Fittings required by the contractor in the execution of public works.

By W. DAVIS HASKOLL, C.E.

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London: Lockwood and Co., 7, Stationer's Hall-court, E.C.

At all Libraries and Booksellers, post 8vo., with Map, 10s. 6d.

(London: Longmans and Co., Paternoster-row.)

WESTWARD BY RAIL: From New York to San Francisco.

By W. F. RAE.

"The increasing interest felt in this country in all that relates to the Pacific States, in consequence of the large amount of British capital invested in the Mines, will doubtless cause Mr. W. F. Rae's 'Westward by Rail' to be read by a very large number of Englishmen; and as it is as amusing as it is replete with information, no one will regret an acquaintance with it. An entire chapter is devoted to the description of the State of Nevada and its silver treasures, and in this connection Mr. Rae affords a useful hint to intending investors. His book should be carefully studied by all classes of readers, both in England and America."—*Mining Journal*.

Notices to Correspondents.

* Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be filed on receipt: it then forms an accurate and useful work of reference.

PROVIDENCE.—Every information respecting this mine can be obtained on application to the pursers, Messrs. Higgs and Sons, Penzance. With reference to the enquiry in last week's Journal, we are assured that no letters had ever reached Messrs. Higgs that have remained unanswered.

COAL MINING.—"W. B." (Penrith).—The best work on the subject is probably Greenwell's (Spon), published at 2s. 15s., 3s. 3s., and 3s. 10s., according to binding. Hyslop's Colliery Management is also an excellent and very cheap work, containing ample information upon the working as well as management of collieries; the price is 15s. Either work will be forwarded on receipt of the amounts by Post Office Order.

CHROME ORE.—"A. S. S." (Glasgow).—Replies to enquiries in this column must always be so made that all readers of the Journal may have the advantage of the information given. Correspondents requiring to establish private intercommunication must avail themselves of the advertising columns. If "A. S. S." will kindly forward to us the information offered in his letter we will willingly publish it.

THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, FEBRUARY 11, 1871.

THE IRON TRADE, AND ARBITRATION.

Wages disputes in the iron trade are again coming to the front, but not, we believe, to remain there so long as was at one time not unusual. The malleable ironworks in Scotland have been "out," resisting notice given by their employers for a reduction in their wages; the same class of men in the North of England have been saved from a similar hostile attitude by the existence of a Board of Arbitration; whilst the ironmasters in South Wales have now given their men notice that a month hence they must submit to a reduction averaging about 10 per cent., notice being at the same time posted at the pits which supply the ironworks. It is not for us here to enter into the merits of the case on either side. It must be manifest to everyone that the ironmasters are not likely to be able to continue to give the wages in the time of depression that has succeeded upon the Franco-German war, and the consequent serious drop in prices, that they were quite able to pay before. The case of all is pretty fairly stated in the case of the masters in Wales. It is shown that for the last three months the condition of the rail branch has been such that during most of that time the question of a reduction of wages has been under serious consideration. The fall of prices almost immediately after the declaration of war fully justified the employers in taking immediate steps to carry out a proportionate reduction in wages; but, as there were a good many old contracts on the books, it was determined that no change should take place as long as the old orders lasted. Hopes were afterwards entertained that the war would soon be at an end, and that a speedy revival would follow. The Black Sea difficulty added to the dulness which prevailed, Russia being so large a buyer of rail-iron that any interference with the demand from that country could not fail to prove a serious blow to the trade. All these difficulties succeeding one another, together with the doubt which still exists as to the prospects of peace, have determined the ironmasters in Wales to take the step we have indicated.

The ironworkers in the North of England, looking for a continued upward rise in prices, gave notice before the war began for a rise of 10 per cent. even upon the 5 per cent. advance which they obtained in February, 1870. When hostilities had broken out, and orders fell off and prices dropped, the masters in the North, on their part, gave notice for a drop of 10 per cent. Mutual conference between representative masters and representative men led, however, to the men consenting to a 5 per cent. drop being kept back by their employers, subject to the decision of the arbitrator, who was afterwards to hear both sides, and decide between them. The arbitrator has heard both sides, and has decided, and this is his answer:—

"I, THOMAS HUGHES, the arbitrator appointed by a resolution of the Board of Arbitration and Conciliation for the Manufactured Iron Trade of the North of England, dated Dec. 31, 1870, having heard the statements of the representatives of the employers and of the workmen on the said board, and having carefully considered the matters referred to me, do hereby award and declare that there shall be a reduction of 5d. per ton on the wages paid to puddlers, and of 5 per cent. on the wages paid to other workmen in the employment of the several firms and persons presented at this board; and that such reduction shall take effect from Jan. 1, and continue until July 1, 1871; or in the event of no further change being made by resolution of the said board, or by arbitration, after the said first day of July, 1871, then until March 31, 1872.

Feb. 6, 1871.
* N.B.—In using the phrase '5 per cent. on wages,' in this award, I mean to indicate the precise sum which was added to wages by agreement of the board in February, 1870. My intention is that the exact advance then made shall be now taken off."

By this decision we have no doubt that the men in the North will abide strictly. Their conduct, hitherto, in connection with the business of their Arbitration Board has been such as to give confidence as to the future. Unless, like their employers, they had shown a disposition honourably to work out the system, no such preliminary arrangement as that which enabled them to go on working under the conditions we have named, subject to the ultimate decision of Mr. HUGHES, could have been carried out. Upon this they have to be congratulated. Thus they have avoided a source of irretrievable loss. If they on the one hand had ceased to work, and the masters on the other had declined to be satisfied with an interim reduction of 5 per cent., both sides would have gone on losing money that could never be replaced. Wanting some such agreement, the masters and workers in Scotland are losing between them, perhaps, 30,000*l.* a week as utterly as if they should altogether destroy so much specie, that might otherwise have been theirs—to say nothing of the wretchedness and loss that others simultaneously experience as a consequence. What will occur in Wales remains to be seen. Meantime we cannot but expect that the decision at Saltburn will restore the profitable connection between men and masters in Scotland. Upon the result of the North of England arbitration the future action of both sides in Scotland was from the first understood to be pretty much dependent. Our readers need not have the facts of the nine days' arbitration before Mr. GEORGE ANDERSON, the member for Glasgow, which followed the last previous strike and lock-out in Scotland, again brought before them. It need simply be said

here that in the end Mr. ANDERSON awarded the puddlers an extra 6*d.* a ton, and that all doubling that had been paid for at the rate of 1*s.* extra should be paid for only at 6*d.* Mr. ANDERSON, the masters understood thought that the puddler was entitled to this extra pay on account of having to turn his ball two or three times under the hammer, and always argued that if the masters did away with this extra work, the same as in the North of England, he would not have given it. The masters now say:—We will not require the puddler to turn his ball at all; take off the 6*d.* the arbitrator gave him for this extra work, and pay the shingler a trifle more for the work. But an account of the bad state of trade we must reduce the wages 6*d.* per ton, contingent upon the decision of the arbitrator in the North of England. If he decides that the men are entitled to get back the 6*d.* now (then) being held by the masters, then the reduction in Scotland will be only 6*d.* per ton, and not 1*s.*, thus virtually placing the men in the same position as they were when the prices of bar-iron were higher.

In Glasgow arbitration was utilised to stop a ruinous feud. It did stop it, but at great cost to both parties, for each side had to pay its own costs. But it was only a piece of impromptu arbitration, and defective in a very important feature. However fearful the Legislature may be of bringing about once more the barbarous practice that prevailed under the Statute of Labourers, when a system of quasi-slavery subsisted, yet in modern times the extensive sales of iron rails, for instance, removes all objection to an independent vendor of labour selling, and a purchaser buying the same commodity in a reasonably large quantity wholesale, "for forward delivery." Thus forcibly that very practical and consummate arbitrator, Mr. RUPERT KETTLE, put it on Dec. 30, when at a sessional meeting of the Social Science Association, in London, he read an admirable paper "On Boards of Conciliation and Arbitration between Employer and Employed, and what is required to give them further success." Upon that paper we shall have something to say next week. At this moment we confine ourselves to pointing out how, notwithstanding the recent arbitration in Scotland, we have masters and men again crossing swords, at the same time that we contend that the difficulty need not exist. We blame neither masters nor men for making the arbitration of last summer only partially effective. But it is clear that labour agreements in the iron trade, and other leading industries of the kingdom, must have a specified prospective as well as a stated immediate effect. The men in the North of England know the value of the arrangement, and their masters regard it as one of the most valuable of the results of the system in vogue there.

Let it be hoped, therefore, that very soon Scotland and Wales will both be able with as little difficulty to carry out a system of arbitration in all its entirety.

THE SCOTCH MALLEABLE IRONWORKERS' STRIKE—ITS COST TO THE WORKMEN.

At the beginning of this year, from facts which were in our possession, and from others which were laid before us, we considered ourselves justified in supposing that the Scotch strike would be of limited duration.

Up to the end of this week—which circumscribes the time to a limit of five weeks—we are informed that the strike has entailed on those engaged in it a loss of between 50,000*l.* and 60,000*l.* It is calculated that fully 11,000 men of all classes have been thrown out of employment by the disaster; and if their wages are taken on an average at 1*l.* each, which is under the mark, they cannot fail to have lost very nearly 60,000*l.*

Now, as the great majority of these men live from hand to mouth, have no preparation made for strikes, nor their ulcerating influences, what an amount of avoidable privation and misery must the want of 50,000*l.* or 60,000*l.* entail on their innocent children and dependents? Unfortunately, the wives of such men have not yet learned the art of feeding their families on stews of macerated bones or rat's-tail soup, or on the nameless offal which sufficed to keep in life the beleaguered Parisians during a torturing siege. Nor, if they had, would such dainty fare suffice a puddler's appetite. Hence the necessity that the heads of households should hail all reasonable opportunities for bringing such strikes to speedy end, in order that they may provide honestly for their offspring their "daily bread." That the families of our ironmakers now on strike are suffering much needless privation cannot be doubted, and had they only accepted the conditional terms of the masters, which, it will be remembered, was to place the Scotch workers on the same footing as those in the North of England, they would have been in the enjoyment of all their comforts, and gain all they are likely to secure by a strike prolonged *ad infinitum*.

Now that Mr. HUGHES has given his decision as between the North of England ironmasters and their workmen, reducing the puddlers 6*d.* per ton, and the millmen 5 per cent., we hope the Scotch strike will be brought to a close, by the acceptance of the same terms. The Scotch puddlers, who have met since Mr. HUGHES's award was made, have declined to acquiesce in the decision, as it does not embrace a 6*d.* advance given by Mr. ANDERSON, who arbitrated for them so recently as November last, although they have been relieved by the masters of the work for which the 6*d.* was granted. In these circumstances, to make this 6*d.* a "bone of contention" is neither just nor reasonable; and if it is doggedly persisted in, it is difficult to foresee what "figment" may not be converted into reasons for originating or prolonging a strike. Taking, however, all the circumstances of the case into view, we trust our Scotch friends will realise our hope that this inopportune strike will have only a limited duration.

THE SOUTH WALES MINERAL BASIN.

Our readers will probably remember that some three years since Mr. EVAN DANIEL, the well-known mining engineer, of Swansea, was appointed by the Royal Coal Commissioners to the important office of Mining Engineer to the Commission, for the western division of the South Wales coal basin. The duties appertaining to the office were not only onerous and important, but were such as required a most intimate practical acquaintance with the South Wales coal field. At the time of Mr. DANIEL's appointment we ventured to predict that he was eminently qualified for the office, and that the work would be performed in a manner highly satisfactory. During the past week we have been favoured with a view of the whole of the plans, sections, diagrams, computations, and summaries of computations compiled by Mr. DANIEL, and most assuredly our predictions as to the manner in which this work would be executed have now been most fully verified. Our readers can form but a very imperfect idea of the immense labour—the almost interminable calculations—which these three years' work has entailed. Suffice it to say that Mr. DANIEL has personally visited the numerous collieries in his district, extending from Bridgend on the one hand to the extreme end of Carmarthenshire on the other hand. The plans have been elaborately divided and coloured, and comprise sections of the veins on the south of the great anticlinal—the south crop and north crop of the basin. But not only so; the exact position of every colliery in the district, the direction of the numerous "faults" in this great central coal basin, is most minutely marked, whilst the total quantities of coal already worked, and the quantity still remaining in the various seams unworked, have been ascertained by means of careful and most elaborate calculations.

Of course, in a large area like that of South Wales the coal lies at very unequal depths, consequent on the numerous faults and dislocations, and Mr. DANIEL, by means of numerous coloured diagrams, shows at a glance the area which can be worked at these various depths, all of which valuable information has been obtained by means of numerous sections supplied and taken by himself. We were not at liberty to take notes of the results arrived at by Mr. DANIEL, as the information has been prepared especially for the Royal Coal Commissioners, who are about resuming their investigations, and in the course of a short time the plans, sections, and calculations, &c., will be produced, and the evidence of the most able scientific mining engineers taken thereon. We may, however, state, without any breach of confidence, that the results of Mr. DANIEL's labours prove that at the present rate of coal consumption the South Wales basin will last for several centuries yet to come, and not the slightest fear need be entertained that there will be any scarcity of

fuel for generations to come. The plans, diagrams, &c., which are now being forwarded to the Royal Commissioners, are most valuable to the mining world generally, whilst they may justly be regarded as proof of the practical ability, personal knowledge, energy, and perseverance of the gentleman to whom such important duties were fortunately entrusted.

EFFECT OF COLD ON IRON AND STEEL.—The experiments for ascertaining the effect of cold upon iron and steel, recorded in papers read before the Manchester Literary and Philosophical Society, and referred to in the *Mining Journal* of Jan. 28, have been continued by Mr. W. H. JOHNSON, of Bowdon. He was careful to maintain a nearly fixed temperature, and thus avoid to a great extent the error occasioned by the rise in temperature consequent on sudden torsion. A piece of charcoal wire rod, 0.237 in. in diameter, was carefully tested. Tested at a temperature of about 40° Fahr., a sample of this bore 20 twists, while the adjacent piece, raised to the temperature of melting zinc, stood but 10 twists. In the second experiments the figures were 19 and 9 twists respectively; and in the third 17 and 7. Twisted very slowly, surrounded by salt and snow, a sample bore 19½ twists, while at a temperature of about 40° Fahr. it stood but 15 twists. The great diminution of strength at the temperature of melting zinc was noticed as very remarkable. Mr. BROCKBANK considered these experiments did not affect the conclusions stated in his paper. He believed that the strength of iron under torsion was most effected by the heat developed by the twisting, and that the cooling mixture employed by Mr. JOHNSON would have the effect of making the wire stand a greater number of twists by counteracting the excessive heat produced by the torsion.

THE IRON AND STEEL INSTITUTE.—Probably few societies have made such rapid and satisfactory progress as the Iron and Steel Institute, much of its success being attributable to the ability and earnestness with which the Duke of Devonshire has performed the duties of President, and the step which has been taken by the council with regard to the record of the proceedings of the Institute is calculated to prove highly advantageous to the members, and, therefore, to increase the popularity of the society. The "Journal of the Iron and Steel Institute," which is to take the place of ordinary "Transactions," forms a good octavo volume of nearly 300 pages, and is illustrated with an abundance of plates; it is intended to embrace all matters of interest, both of a practical and theoretical character, bearing on the manufacture of iron and steel, and as it may be assumed that it will be supplied gratuitously to members, they will possess something more than mere honour to remind them of their connection with the Institute. Mr. David Forbes, F.R.S., has undertaken the office of foreign secretary, and will undertake to furnish in each number an outline of the contents of the various continental journals devoted to technical matters connected with the iron and steel industry. The first foreign report is necessarily very incomplete, and has evidently been hurriedly prepared, but the idea is excellent, and if carried out with sufficient care and assiduity will become a really invaluable record. The volumes will prove of great utility to all connected with the trade.

NEW ZEALAND COAL.—The New Zealand House of Representatives has had an interesting debate upon the subject of the coal wealth of the colony. Mr. Stafford referred to the coal field on the Grey River, and said that both there and in other parts of New Zealand excellent coal could be obtained if proper facilities existed for working and maintaining it. Another speaker argued that the Mount Rochfort and Grey River seams alone could supply the whole colony with coal. Another speaker observed that specimens of coal raised at Mount Rochfort had been shown at the New Zealand Exhibition at Dunedin; the quantity of this coal was estimated at 145,000,000 tons, and its quality was found to be equal not only to Australian, but also to Welsh coal. From the years 1853 to 1869, inclusive, New Zealand imported coal to the extent of 693,633 tons, and of the estimated value of 1,324,030*l.*

MINING IN NEW MEXICO.—The close resemblance of the ore in the newly-discovered Cienega district to that of the White Pine region has been remarked by many experienced miners, and letters recently received from Silver City, some 50 miles north-east of Ralston, are of the most encouraging character; numerous statements having been received that even the explorations already made indicate that the ore occurs in well-defined fissure veins, and not in pockets, as is the case at White Pine. However this may be, it is certain that in the immediate vicinity of Silver City there are immense deposits of silver ore, the richness of which is unquestionable, and the quantity of which, whether it lie in pockets or veins, is well nigh inexhaustible. The portion of the district in which the ore is most abundant extends over a space fully ½ mile in width, and running north-east and south-west for a distance of three miles. The work, so far, has been little more than prospecting. Shafts, some 10 or 12 ft. in depth, have been sunk, and the requirements of the law generally complied with, but no extensive operations have yet been undertaken. The ore taken out at these shafts assays from \$1000 to \$2200 to the ton, and some specimens have even gone as high as \$3500. The greater part of this ore partakes of the nature of chloride, or what is called "horn silver." Rich as it is, it sinks into insignificance beside a discovery which was made six months since, in what is known as the Chloride district, where ore has been obtained averaging 80 per cent. of pure silver. The Pinos Altos Gold Mines, about 10 miles north, were discovered and worked before the war, and are said to have already yielded several hundred thousand dollars worth of the precious metal. But little work is being done here, except in the way of placer mining. The gold quartz is found in a range of hills nearly 1000 feet above the level of Silver City. The richest ore is found in the very tops of these hills, and it gradually decreases in value as we descend. As the gold disappears silver is developed, and still deeper copper and iron pyrites are found in immense quantities. The latter have been found so difficult to work that they have never been penetrated, and the mining has been confined to surface operations.

MINING IN THE UNITED STATES.—In its annual business review for the year just passed, the *New York Tribune*, which is an excellent authority on such matters, refers to the mining of the precious metals in the following language:—

"We produced at least sixty millions of gold and silver in 1870—probably more—and exported rather less than that amount, leaving our imports of specie as clear gain. We estimate that there are thirty millions more of coin in the country to-day than one year ago. Recent developments of remarkably rich silver lodes in Colorado, New Mexico, and more especially Arizona, justify the expectation of an increased product of the precious metals in 1871, and a still greater increase thereafter. When the Southern Pacific Railroad shall have traversed Arizona we are confident that our annual product of gold and silver will average two hundred millions of dollars. We have no reason, therefore, to deplore the exportation of the precious metals, since that does not now prove an unfavourable balance of trade. Gold and silver have become staple products of the United States, like wheat, bacon, and cheese, and will henceforth be exported more extensively than they are imported by us so long as our mines shall remain productive."

DOMINION OF CANADA OILS REFINERY COMPANY (LIMITED).—HUGHTON AND HOWELL'S PATENTS AND PROCESSES.—The prospectus of this company is now complete; the capital is 150,000*l.* in 30,000 shares of 5*l.* each, to be fully paid up, but only 13,000 shares are offered for allotment. It will be seen by reference to an article "On the Oil Trade of Canada," which appeared in the *Journal* of Nov. 5, and to which we refer our readers, that the oils manufactured by this process are reported to be unsurpassed for purity, being thoroughly deodorised, cheapness, and durability; and that even hot cylinders and hot bearings have no appreciable effect upon their lubricating oils. The profit upon the manufacture, as stated in the prospectus, and vouched by figures, ranges from 100 to 300 per cent. on the capital employed, which is thoroughly startling to ordinary investors; but the surprise will soon be lessened when the fact is regarded that the outside price for the crude oil of Canada is \$2 per barrel only, while the United States crude sells at \$8 per barrel, showing a difference of 2*s.* per barrel in first cost; and this on 350,000 barrels per annum, the quantity at present proposed to be treated under these patents, and rendered equal to the best American, leaves no further room for question on that head. The company do not propose to purchase oil wells or lands, but simply to continue the manufacture of residuum and crude oil; and, therefore, as is alleged

no element of speculation enters into its operations. The certificates from eminent London and country firms confirm all the Canadian statements, and these are again supplemented and strengthened by extensive orders for the oils. One order from a celebrated company extends to 100,000 barrels per annum, the profit on which is represented to be 300,000.

MINING IN NORTH WALES.

Although the condition of the Coal Trade is satisfactory, yet there is a feeling of uneasiness in several districts, owing to the efforts being made by agents of the Amalgamated Association of Miners to cause a strike unless an advance of wages is conceded. Coalowners, however, are not in a position to accede to such demands, and the result has been that rumours of strikes have prevailed, and the collieries named at which the men would give notice. Mr. T. Halliday, the president of the Amalgamated Association, and one of the agents, have been visiting some of the districts. One of the latter, a Mr. Wroe, met with a reception of anything but a flattering character on visiting a colliery near to Mold. He went into the manager's office, gave his name and business, and was very unceremoniously thrust out, his honour being wounded in the most sensitive part; for, as Huxtable puts it—

"One would behind him honour more
Than twenty blows received before."

As a rule, however, the colliers have no desire to strike, knowing from past experience that to do so would ensure a long season of suffering and poverty to themselves and their families. But, as members of the association, they are obliged to follow the lead of others. Still, seeing that the amalgamated body, if out to-morrow, could not pay their members one week's pay, and as there is no sympathy between them and the National and South Yorkshire Association, we do not think a strike is imminent, but believe that the leaders will confine themselves to threats.

The accident which took place about a fortnight ago at the Rose Dew Colliery, near to Wrexham, by the flooding of the mine with water, although of a serious character, is likely to be soon overcome by the exertions being made to clear the shaft. Indeed, we were informed by the respected manager, Mr. Wilson, that he expected to get the pit clear to the point of the outbreak, if not further down the shaft, in the course of four or five weeks. It will be recollected that, owing to the vast quantity of water met with, the sinking operations extended over some four or five years, the shaft being 350 yards deep. The place where the water broke out was through the sheeting, about 120 yards from the top, the crevice being about 1/2 in. in depth, and about 1 foot in length. When once that place is reached the water will not be much difficulty in stopping the progress of the water, which is being pumped out at the rate of 2 1/2 million gallons every 24 hours.

In the Mold district the collieries are doing a very fair business. At Leese-wood Green a good deal of excellent Cannel coal is being raised, and the men are so far showing no disposition to leave work, although the colliery was at one time the centre of disaffection, and the workmen at it caused the riots in Mold in June, 1869, when four persons were shot by the soldiery. The Bronfield Colliery, which was downed some months ago, has been cleared of the water, and is now in the market for sale. The Bronwillfa pits, now under the management of Mr. Cottingham, are doing an extensive business, and are raising a large tonnage of coal. At the Coppia Colliery, well known for its fine Cannel and other coal, the main coal has been found in a new tract of ground, and promises to turn out very well.

The extensive mineral fields in the neighbourhood of Hawarden, belonging to Sir Stephen Glynne, and his brother-in-law, Mr. Gladstone, our Premier, are likely to be more fully developed than has hitherto been the case. In addition to several valuable seams of good steam and house coal, there are some fine beds of excellent clay in connection with them. At the Aston Hall Colliery, the lessee of which is Mr. Gladstone, they are working the new seam, and the Three-foot and Four-foot coal. To extend operations, a pair of 24-in. cylinder engines are being put down. The lessees of the colliery, which includes several large Yorkshire capitalists, have erected large brick and tile works, with all the most approved machinery and appliances, and expect shortly to do business on a very extensive scale, as they will be able to ship their material from the River Dee, at Queensferry. Recently Mr. Gladstone invited his new tenants to meet him at Mr. Smith's, the Hawarden Castle Hotel, and where a most *recherché* dinner was provided for them. About 70 sat down, when Mr. Gladstone occupied the chair, and in a happy manner spoke of the advantages of a good feeling being cultivated between landlord and tenant. He also alluded to the increased work being found by the opening out of the minerals in the district.

At what is known as the Buckley Mountain Colliery, there are about three miles of excellent clay in connection with them. The Little Mountain Colliery has for some time been doing very well, sending a considerable tonnage of coal to Chester and Birkenhead, and also supplying locomotive coal to the London and North-Western Railway.

At the South Buckley Colliery, which is now under the management of Mr. P. Higson, Jun., some new boilers have been put in, and are raising a considerable tonnage of coal of good quality, there being a ready sale for it for the use of the works in the locality. The main coal is being worked at the Buckley Colliery, where sidings are being put from the pits to join the Buckley and Connaught Quay Railway. Although but little has been done, so far the prospects are now most encouraging, and once communication by railway is completed a large business will be the result.

Queensferry, situated in Flintshire, and distant about six miles by railway from Chester, has several important advantages as a mining district, where the minerals raised have to be sent to distant localities. Having a station on the London and North-Western Railway, the coal raised can be sent either to Chester and Birkenhead, or down the line towards Holyhead, or it can be shipped direct from the quay by the Dee side, from which a good deal of coal is sent to Dublin and other places. Amongst those collieries which have been seen and embraced the natural advantages of position to which we have alluded may be mentioned the Prestatyn Colliery company. Their Eleanor Colliery, underneath and across management of Mr. Gildrey, who has seen it through all its stages since the sinking commenced, is now doing a large and profitable business. There are four beds being worked—two Four-foot beds, a Three-foot bed, and a Nine-foot one. The last named has been proved to be a seam of good steam coal, and nearly 1000 tons of it are now being drawn weekly. It is, however, expected that the drawing will shortly be nearly doubled, so that the prospects of the concern turning out highly profitable are in every way healthy and bright. At Mr. Thompson's Colliery, in the same locality, a large trade is being done, the workmen getting the Twelve-foot seam, as well as the lower bed in the two new pits.

At Baglit, near Holywell, where for some time past the sinking of probably the largest shaft in the kingdom has been proceeding with, under more than ordinary difficulties, a good deal of coal is being raised. The Butterfield colliery, the shaft of which is upwards of 20 ft. clear in diameter, sinking has been proceeding satisfactorily of late. The Baglit Colliery Company's pit is doing very well, working no less than four beds, including the Three-yard, the Double, and the Yard coal.

Some three or four miles from Holywell is one of the largest collieries in that part of Flintshire, and where a good deal of the coal is got under the bed of the River Dee, and known as the Mostyn Colliery, belonging to a small company, which has recently taken to it, and of which Mr. Lancaster is one of the principal members. In addition to the working of the coal there are some valuable deposits of ironstone not far from the pit, and for the purpose of utilizing it two blast-furnaces are being erected near to the pits. Branch lines to the railway are also being constructed, and a sea wall has been built between the River Dee and the railway. Other collieries, it is said, are likely soon to start in Flintshire, seeing that not only are there extensive fields of coal in the interior of the county, but a supply under the basin of the River Dee that will take some hundreds of years to exhaust. The ironworks at Hawarden and other places are kept well going in boilers, general castings, and machinery for mining requirements.

Increased progress is being made in the development of the valuable deposits of lead ore in North Wales, yet it is scarcely equal to what might be expected, seeing the large number of mines being worked. At the present time there are upwards of 160 mines, where more or less ore is being raised, yet only a moiety of them are paying dividends, whilst a great number are not even making expenses. One of the main drawbacks to many of those concerns is the limited capital which has been embarked in them, and the consequent want of efficient machinery for the pumping of water and other material purposes. Such places as Bronllyd, which in 1869 raised 533 tons of ore, and the valuable Llysborne Mines, which include the Frongoch, with several others, show that Cardiganshire contains some fine beds of ore, and are about the richest of any, so far as regards silver, in the Principality, giving an average of more than 8000 lbs. to the ton. Montgomeryshire has the noted Van, the well-known Dyllife, the Llanerch-ydrau, and about 14 other mines, producing at the present time a very large tonnage of ore. The Minera and the Maes-y-Safon appear to be the only mines of any great consequence in Denbighshire, whilst Flintshire, having the greatest number of mines, produces a very moderate quantity of ore when compared with the counties previously named. Still, Flintshire contains vast tracts of mineralised ground, which in all probability will not be developed for many years to come. Some progress, however, is being made in that direction, and some recently opened out concerns give every promise of turning out profitable. Amongst these may be named the Mold Mines, formerly the old Cathoic, and the Ghan Alyn. The Haikin Mountain has long been considered one in which fine ore would be found, and the mines there have turned out to be profitable. The Holywell Level having in particular been very successful for a long time. A new mine in the same district, under the name of the Ffron, is now being started under the management of Mr. Francis, of Holywell, and new engines and machinery are being put down. The prospects of success are said to be very promising in level. At West Pant-y-go they are now engaged in driving out, under the superintendence of Mr. Philip Blake, of New Haven, to do very well. The Rhosmor Mine has been standing some three or four weeks owing to an accident to the machinery, the flue of one of Balter's engines having given way, owing to the thinness of the iron. The men are now waiting to see the result of the examination of the boilers and the putting down of new ones if necessary.

THE GEOLOGICAL SURVEY OF CANADA.—The loss which the Canadian Survey had sustained by the decease of Mr. Hartley was referred to in the *Mining Journal* some weeks since, and we are now enabled to subjoin the very interesting obituary notice by Dr. T. Sterry Hunt, just published in the *American Journal of Science and Arts*:—"Mr. Edward Hartley, Mining Engineer and Geological Survey of Canada, died in Picton, Nova Scotia, on Nov. 10, aged twenty-three years. Mr. Hartley was the eldest son of Mr. William M. B. Hartley, of New York, and grandson of Mr. Philip Blake, of New Haven. He early showed a special aptitude for the study of the natural and physical sciences, and for mechanics. At the age of 15 he became a student in the Sheffield Scientific School of Yale College. On leaving the school, though still very young, he was at once charged with the examination and surveying of mineral lands in Maryland and Pennsylvania, and subsequently with the erection of

machinery for working gold in North Carolina. His abilities attracted the attention of the officers of the Geological Survey of Canada, under Sir W. E. Logan, and in July, 1868, he joined the Survey as a geological assistant. The following year he was appointed Mining Engineer to the Geological Survey. His duties from this time confined him to the coal fields of Nova Scotia, where in 1868 he worked conjointly with Sir W. E. Logan, and in 1869, alone, completing a careful and detailed survey of the Pictou coal-basin, of which an elaborate report by Sir William and another by himself was printed and privately distributed before his death. It will be published with a map in the forthcoming volume of the Geological Survey. During 1870 Mr. Hartley was engaged with an assistant in the survey of the Cumberland coal-basin in Nova Scotia, and of the Cape Breton collieries, and had nearly completed his labours for the season when he died, after an illness of but six days duration, brought on probably by labours beyond his physical strength."

REPORT FROM SCOTLAND.

Feb. 8.—The stock of pig-iron in warrant stores has suffered a diminution of 6611 tons during last month, but against this same is to be placed an augmentation of about 40,000 tons in makers' hands, which increases the stocks in makers' and warrant stores something like 34,000 tons in the first five weeks of the year. This would be an ominous adverse total, were it not that during the month home business was at a stand-still, and shipments were limited by the unusual severity of the weather, which froze up canals and inland rivers, and impeded all traffic by rail. These circumstances seem now overcome, and with hardening prices there appears the probability of redeeming the past. In January, the average price of pig-iron was 51s. 6d., as against 56s. 3d. in the month of January, 1870, which still leaves a considerable margin in favour of buyers. The bettering of prices has continued during the latter end of last and beginning of this week; and although yesterday not much business was reported, sellers held at 51s. 9d. cash, and buyers came close up to this quotation. To-day the market was very strong, and 52s. 1d. to 52s. 3d. cash, and 52s. 4d. to 52s. 6d. a month, was paid for about 10,000 tons, closing buyers at the highest, sellers 1d. per ton more. No. 1, 52s. 6d.; No. 3, 51s. 9d. Makers' Iron, No. 1—Coltness, 61s.; Gartsherrie, 60s.; Shotts, 57s.; Langloan, 55s.; ditto ex store, 53s. 6d.; Carnbroe, 55s.; ditto ex store, 52s. 3d.; all Eglinton (at Ardrossan), 52s. 6d.

The shipments for the week not only show a better coasting trade, but an increase on the whole, the foreign and coastwise reaching together 9349 tons against 7817 tons in the corresponding week last year. This is the first increase this year over the shipments of the corresponding week of 1870, which we hope will be maintained.

In Manufactured Iron we can only note a continuation of the strike generally, with nominal quotations, and business paralysed. At a meeting held yesterday at Motherwell, Mr. Hughes's decision was read and discussed by the workmen, who ultimately resolved to offer their services on the terms which Mr. Hughes had decreed; but the puddlers would on no account submit to the withdrawal of the 6d. awarded them by Mr. Anderson for following their iron to the hammer, even though the masters had provided others to do the duty. In this "fix" the question is now held as in a vice, the puddlers showing themselves unable to take a reasonable view of their position. They have not got any funds from England to assist them in maintaining the strike, although they have got "good" promises, and yesterday deputations were appointed to travel the country to warn against giving subscription to others than those accredited to raise the "sinews of war," so as to enable them to hold their untenable position some short time longer.

The Govan Malleable Works are expected to have their engine in working order by Monday next, but the damage done at the Bloch-ain works will take a week or two longer to make good.

Coals are a turn quieter, the fresh weather bringing easier prices and a more limited demand. For spring shipment a few enquiries have been made, but prices offered prevented business being done. Manufacturing coal is well sustained, and burnt coal and coke meet with ready purchasers. Prices are not being quoted lower, but a drop of perhaps 6d. a ton will have to be submitted to before the month is closed. The shipments for the week amount to 32,913 tons, against 28,673 tons in the same week of 1870.

A large bin of coal caught fire at Gartsherrie Ironworks, Coatbridge, which kept blazing on for several days. The mass was, however, allowed to burn itself into ashes, without doing more injury than consuming the coal. Although the value of the fuel was considerable, the Gartsherrie firm will be able to sustain the loss.

A monster blast, of about 4 tons of gunpowder, is expected to take place at the Bonaw Granite Quarries, Argyllshire, on Friday this week. Miners have been employed during the last 18 months preparing horizontal headings and powder chambers, and the civil engineers of this neighbourhood have been specially invited to witness the firing of the mass, which is to be done according to scientific principles.

REPORT FROM THE FOREST OF DEAN.

Feb. 9.—One of the principle subjects engrossing the attention of persons connected with mineral property here is the new draft Bill, framed by the Crown lawyers, preparatory to a new Act for regulating the working of mines in this district. This step has been taken at the instance and in consequence of the strong feeling exhibited by the Dean Forest Defence Association. The new draft Bill does not by any means meet the wishes or the requirements of the district; all persons, therefore, at all interested in mining here are invited to study, and give in their opinions and recommendations to the Defence Association Committee. Every clause will be well and manfully fought, and if there are not persons on the committee of management of pretentious views and feelings some good may result. Where, however, we find would-be mining men putting themselves forward as leaders in such a cause we certainly cannot expect great benefit to the community at large from the ability at least of such advisers. Gentlemen of years and experience in mining in this district are those best qualified to lead, but a certain amount of indifference must always be the result when the inexperienced will at all risks step in and occupy a standing which they fancy will bring them into a prominent position. Mining is like every other profession or occupation, a knowledge of it cannot be picked up in a moment; it can, however, be professed in the lateral sense, although not possessed. If the ability to manage a mining property could be acquired without either experience or its equivalent there would be no inducement to spend five or six years as a pupil of some mining notable in order to acquire a thorough theoretical, as well as practical, knowledge of the profession.

At the Thatch or Independent Colliery explorations have been going on for the purpose of discovering the actual boundary line which divides it from the adjoining colliery—the Hopewell, in Wimberly Bottom. It appears that prior to 1864 the owners of the last-mentioned colliery drove to and crossed the boundary line, taking from the other property over 50,000 tons of coal. The levels from the Thatch or Independent Colliery are driven from the side of a hill, and bear nearly north for a considerable distance; the strata then rise from the Hopewell to the westward, whilst from the Independent side the rise is towards the east, thus meeting in an anticlinal or natural ridge high up in the hill, at a considerable altitude both from the Hopewell and Independent Collieries. The Commissioner of the Crown under the Dean Forest Mining Act awarded all the coal lying between the deep water level to the ridge, keeping on the west side thereof, to Mr. Lewis, of Lydbrook. From the water level at the Hopewell Collieries to the same ridge, and on the east side of it, the coal was awarded to Mr. Peter Tague and others, of Coleford. The north-west portion of the Independent was worked by Mr. Lewis for more than 30 years after the award was made by the Crown, while the southern portion was left untouched by him, and reserved to be worked at another time. In 1864, however, the old Independent level was re-opened, and gate-roads driven up on the inclination of the strata with the intention of getting the coal. It was then discovered that a great portion had been worked from the Hopewell Colliery. Other exploration roads were driven, and at all points like results were obtained. These exploration roads were continued on through the old workings until the ridge or anticlinal line was met at several points.

The services of Mr. H. D. Hoskold, of Cinderford, were engaged, and as engineer he conducted the excavations, made surveys, and took levels thereof; and, after consulting with the plaintiffs—as representatives of Mr. Lewis—it was decided that he should select some good lawyer to carry on the legal department. It was ascertained by him, prior to employing a solicitor, that the quantity of coal taken would justify legal proceedings. Messrs. Wintle and Mane were, therefore,

instructed to proceed against the defendants, who eventually put in a plea of right, under an old agreement relating to an exchange as far back as 1802. After a protracted litigation it was agreed to refer the matter in dispute to some gentleman to be named, and sanctioned on both sides. The gentleman was Mr. Osborne, Q.C., but eventually he could not accept the post. Mr. Eldis, Q.C., was then made choice of, and on February 1 the hearing commenced, at the Law Institute, Chancery Lane. The plaintiffs engaged the services of Mr. Dowdeswell, Q.C., to represent the legal, and Mr. Barber the equity department. The defendants engaged the services of Mr. Bevir as their counsel.

The hearing went over six days, and is postponed until Monday next, when it is thought it will be concluded. Mr. Hoskold, the plaintiff's engineer, has taken great pains for a very long time, and saw that everything was conducted properly; the engineering department was, consequently, well represented. Mr. Huxham, of Swansea, had been engaged to survey, construct plans, and a beautiful model of the workings. Mr. Beddington, another Welsh engineer, and Mr. G. Atkinson, of the Forest, were retained for the plaintiff. The defendants were not in a good position, neither with regard to the general case or model. The one which they produced was got up by Mr. Arnold Thomas, of the Belson Colliery, which was not constructed to scale, although he had represented the position of the ridge on it. He, therefore, had a severe time of it from the hands of Mr. Dowdeswell, the plaintiff's counsel, and we were sorry indeed that he was not better prepared with evidence as far as it might have gone.

In the evidence produced by him he asserted that he could never determine where the ridge existed, although he had often visited it when the coal was worked. He also asserted that he had never employed an instrument for the purpose; but a little further on the counsel drew from him that he had crossed the ridge at two points. Mr. Hoskold had determined the ridge to be at 116' 4" and 81' 9" feet at two points above the level heading, and the Hopewell level to be 91' 27" below the Thatch level mouth. All the quantities were also determined; and when Mr. Huxham went over the whole, he found that the surveys agreed. The old agreements of 1802, 1816, and 1829, with these plans, were also looked into by these engineers, and other plans produced from them, so that even supposing a claim existed on the face of them, nevertheless it was shown that even the plea on the grounds of claim was shown to have no foundation whatever.

The Commissioners, in considering their award of 1841, took into consideration the claims of all persons who put them in, and it was their business to make a just and equitable adjustment of all differences, and to settle for ever the metes and bounds of the property mentioned in their award. The claim was set up under the agreement of 1802, was never brought before the Commissioners, so the defendants say, but if they did not think proper to lay claim when public notice was given, how could they expect to be recognised. The fact was they had no claim at all, for there is evidence that all these old agreements came before them, and were duly considered. It is to be hoped that the Arbitrator will decide in favour of the award, and it is thought he cannot do otherwise. It is of vital importance for the Forest that he should, as in the event of his not doing so the whole of the property in the district will be also subject to be upset by the production of some old agreement. We will return to the subject when the case is decided.

TRADE OF THE TYNE AND WEAR.

Feb. 9.—There has been a good supply of shipping lately in these rivers, and trade has been somewhat better, although the Northern and Baltic ports still continue closed with ice. Several steamers have been engaged in taking coals to French ports—that is, Havre and Dieppe. The Coal Export Trade continues very dull, but the demand for coke, both for home consumption and export, continues. The House Coal and Manufacturing Coal Trades also continue good.

From Browne's "Export List" we learn, what of course was anticipated, that the exports of coal for the month just passed are much below those of January, 1870. However, the frost has disappeared entirely here, and it is hoped that the ports in Northern and Eastern Europe will be open soon, when the export trade will be opened. The Iron Trade generally, although no advance is quoted in the lists, is decidedly firmer, with a much better prospect; and now that the war is considered as ended, and the wages question settled, it is expected that the demand for all kinds of iron will be good during the present year. The demand for ship-plates is extremely good at present, and most of the foundries, engine-works, &c., are pretty well employed. The traffic on the North-Eastern Railway continues to increase. The branch from this railway system to the Newcastle Quay has proved a decided success, and imports and exports have increased much in consequence. The weather continues extremely rough and stormy in the North Sea, and much injury and detention to shipping has occurred in consequence. A large number of laden vessels sailed from the Tyne and Wear on Monday, but many of them have been obliged to return to the Tyne for safety.

An accident occurred at Castle Eden Colliery, which caused the death of John Gray, an overman, and seriously injured George Barker. It appears that a set of tubs were being brought to a landing about three-quarters of a mile from the shaft, when the first one fell off the way, those behind being piled above it in such a manner as to bring down some timber which supported the roof. Gray was busy superintending the repairs of the way, when a large piece of stone fell from where the timber had been dragged away, and struck him and Barker. They were conveyed home, but Gray survived only half-an-hour; he leaves a wife and five children. Barker is in a critical state, and there is little hope of his recovery.

The adjourned inquest on the bodies of George Charlton and Wm. Telford Caudish, who were drowned in No. 1 Pit, Seaham Colliery, on Jan. 24, was held on Monday, at the New Seaham Inn, Seaham Colliery. Mr. Willis, Government Inspector of Mines, was present. The first witness called was John Kosby, newer, who said that on the 24th ult. he was working as usual in the west way, Hutton seam, No. 1 Pit, but did not observe anything particular, except a slight dampness towards the bottom of his place, till the water made a rush away, and "all things came away together." Charlton was putting from Caudish, who was two pillars to the dip side of Kosby. There were six newer and two putters working in the flat. They all got out with the exception of Charlton and Caudish. There was no time to warn those two, although every attempt was made to do so. He had no idea of any lodgment of water, or that old workings were there. Another viewer gave similar evidence. Wm. Dakers, colliery viewer, produced a copy of the plan of that portion of the mine in which the water came away, and described the places where the men were working. The coal in the old workings was to his knowledge worked away 10 years ago, and during that time water in those places was made. It was never thought by any of them for a moment that there was water in the place where it broke away. Robert Duffell, the master wasterman, was then called. He produced his own plan of the workings, upon which he had made notes at each examination of the water, for which the syphon was in use. The water which he had examined had decreased at every succeeding visit. Mr. Willis thought they had certainly tried all effectual means with this syphon to get rid of the water. This was all the evidence, and, after a short consultation, the jury returned a verdict to the effect that they considered the casualty accidental, but that all such places should be often examined and reported upon; that due should be affixed to plans and documents bearing upon the condition of the mine; and that the master wasterman was not culpable of guilty negligence, the above recommendations should be adhered to.

NORTH OF ENGLAND INSTITUTE OF MINING ENGINEERS.—At the meeting of members, on Saturday last, there was a good attendance, the main attraction being the reading of the paper of Mr. Beauland's, of Durham. The chair was occupied by the President, Mr. E. Boyd.

After the election of members and other routine business was disposed of, the paper, on "Mine Surveying," alluded to, was read by Mr. Beauland; and it proved to be one of a most elaborate and exhaustive character, treating more particularly of a method of underground surveying introduced by him, but also noticing all other systems of surveying. The ordinary system of underground surveying, as is well known, is by means of the compass or circumferentor, and, of course, in this system of surveying the magnetic needle is of prime importance. In very important surveys, where the greatest accuracy is indispensable, in order to meet existing shafts and drifts, &c., by other drifts, the magnetic needle is liable to cause errors from various causes, which are clearly pointed out in this paper, and in consequence of these errors and defects the writer has invented and introduced a mode of underground surveying, which ensures the greatest possible accuracy. By means of a transit instrument he gets a sort of base line, or starting point into the underground workings, which corresponds with the surface surveys, which have previously been accurately made, and thus he can continue his underground surveys to any distance, no matter how circuitous or varying in level the route may be, and this he can do with so much accuracy that the variation shall only amount to a few inches in a mile.

The paper was well illustrated by diagrams, which were suspended

on the walls, and the author also described many cases where he had carried his system out on an extensive scale, and where the results have fully proved the value of his invention, which he could only have been enabled to make through having some astronomical knowledge. It should also be observed that this paper in some measure concludes a series on Surveying and Levelling which have lately been brought before this Mining Institute. First a paper was read by Mr. A. Ramsay, and one was also read by Mr. Howard of a similar character, and all these papers taken together, the last, no doubt, being of paramount importance, will form a most valuable chapter or treatise on the subject of Mine Surveying and Levelling, and will prove an important addition to the next volume of the Transactions. It is understood that Mr. Ramsay is to succeed Mr. Willis as manager of the Washington Collieries, the latter gentleman having accepted the office of Mine Inspector for South Durham.

MECHANICAL VENTILATION OF MINES.—This system of ventilation continues to make rapid progress, and several of the Guibal Fans have been made lately at the Grange Ironworks, near Durham. As has been often remarked in this letter, this kind of fan has driven all others out of the market here, and one of them was started at the Castle Eden Colliery last week, which has so far given the greatest satisfaction. This fan was constructed at the Grange Ironworks, and its dimensions and results are as follows:—The diameter of the fan is 30 ft., and it was worked up to 66 revolutions per minute; at this speed the water-gauge indicated 3.1 inch, and the quantity of air put into circulation was 114,000 cubic feet per minute—a large quantity of air, and got with a comparatively low water-gauge. The large fan erected at the Usworth Colliery, 45 ft. in diameter, which we noticed some time ago, has not yet been fairly started, but it is expected to be done during the present week, and we shall give an account of its performance. This fan was started some ten years ago, but owing to an untoward accident to the machinery the final start has been delayed some time, but the results from the former partial start were encouraging, and there is no doubt that the results obtained when the machine is got to its maximum speed will be sufficiently startling to the mining world.

WHEATLEY HILL COLLIERY INUNDATION.—The enquiry into the cause of the inundation which occurred at Wheatley Hill Colliery on Jan. 19, by which four men and a boy—John Bell, James Hall, John Walker, Robert Smith, and George Cooper—lost their lives, was held on Thursday in the Reading-room at Wigate Grange, by Mr. Crofton Maynard, coroner. Mr. Hays, underviewer, produced plans of the workings, and showed that the water had accumulated in a narrow bore on the north-east side of Thornley workings, towards which a drift was being driven from Wheatley Hill Colliery, holes being bored at certain distances, one in advance and one on each side, to "tap" the water and let it off gradually. Witness agreed with the theory of an advance hole, but did not see the necessity of having side holes. By his calculation the "square face" in the narrow bore would have been tapped, but he had seen found that the narrow bore where the water stood had been extended 16 yards further down towards Wheatley Hill than was shown by the colliery plans, and thus the water was reached some days earlier than was anticipated. Witness was called on behalf of the colliery, and he deposed that the inundation was the neglect to put in bore-holes to tap the water, and so prevent it from bursting away as the coal was hewed down in front of it; that the underviewer and overman, William Hays and Thomas Watson, were aware of the dangerous proximity of the water, and that the accident might have been prevented by using the flanking holes, which they had neglected to do. The jury returned the following verdict, tantamount to a charge of manslaughter against the viewer, underviewer, and overman:—"That the deceased previously to the water being killed by a burst of water in Thornley Colliery, caused by William Spencer, William Hays, and Thomas Watson, who did kill and slay the deceased above-mentioned by neglecting to put in proper bore-holes." The coroner at once admitted the accused to bail on their own recognizances of 40l. each, to appear to answer a charge of manslaughter at the Assizes. The enquiry lasted ten hours.

REPORT FROM THE NORTH OF ENGLAND.

Middlesbrough, Feb. 9.—The state of trade in this locality is little changed since our last report. The attendance on 'Change at Middlesbrough, on Tuesday, was an average one, but the business done was of a limited character. Pig-iron prices, however, remained firm at last week's rates—46s. 6d. to 47s. for No. 3, 50s. to 50s. 6d. for No. 1, net cash on trucks at makers' works. The uncertainty which surrounds the state of continental politics naturally makes buyers cautious in their enquiries and the giving of orders. The milder weather of the past two or three days has given a slight impetus to shipping, and just now rather more iron is being sent by water. The return of the Cleveland Ironmasters' Association for January shows that the entire make of the district last month was 151,826 tons, which is an increase upon the make of January, 1870, of 17,708 tons, and an increase upon December, 1870, of 2224 tons. As was expected, the returns showed a considerable addition to the stocks in makers' hands. On Dec. 31 these amounted to 194,695 tons; at the close of last month these figures had swollen to 129,515 tons—an increase of 15,993 tons. There is, however, a small decrease to the amount of 700 tons in the warrant stock, which is now 12,019 tons; so that after deducting the increase in the make, and the decrease in the warrant stock, the real increase in stock upon December is 15,000 tons. The shipments of pig-iron to foreign ports from Middlesbrough during January only totalled to 2970 tons, while in the same month last year they were 11,730 tons; and the deliveries coastwise from Middlesbrough during January were 16,838 tons, which is 727 tons less than January, 1870. There are now in the Cleveland district 120 furnaces, 112 in blast and 8 out; there are also in course of construction—new ones and those being re-built—16 more. It is anticipated that when the spring trade has been fairly commenced the present stocks in makers' hands will be quickly reduced. Enquiries for railway material are still few, and insufficient to supply the district with full work. Some firms are considerably better off for orders for rails than others, but we do not hear of any of them being fully supplied for any lengthened period. The settlement, for the time being, of the wages question will tend to assist this department in securing orders, and with a settlement of continental difficulties, no doubt the finished ironworks would be quickly much better off for orders than some of them now are. The Plate Trade is more animated, and there is also an improvement in the bar-iron trade.

The decision of Mr. Hughes, as arbiter for the North of England Board of Arbitration, is generally regarded with satisfaction. It was given on Monday, and is that there shall be a reduction of 6d. per ton on puddlers' wages, and 5 per cent. on those paid to other workmen represented at the board, the same to take effect from Jan. 1, 1871, and to continue until July 1, 1871; or in the event of no further change being made by resolution of the board or by arbitration after July 1, then until March 31, 1872.

Mr. John Stevenson, of the firm of Stevenson, Jacques, and Co., of Middlesbrough, has accepted the managing directorship of the Bowfield Iron Company, Stockton, which was formed some time ago under the Limited Liability Act, and the works will be commenced as speedily as possible.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

Feb. 9.—The trade of the district, so far as regards the production of Pig and Manufactured Iron, is of a steady more than of a very active character. There is little change with regard to the business done in House Coal to London, and the dispute as to the rates between the Midland and Great Northern Railway Companies has, so far, by no means improved the demand from Derbyshire. It is said that from Monday the Midland made a further reduction of 8d. per ton from Derbyshire, so as to continue the rate 18s. 4d. per ton lower than by the Great Northern from South Yorkshire. This most likely will be followed by a similar reduction by the other line. The question naturally arises how long the war between the two companies will last, or what loss they will submit to before bringing the dispute to a close? As it is under existing circumstances few owners are likely to enter into contracts, being well assured that the present state of things cannot last. On the Coal Exchange in London, on Monday, the question relating to the rates was freely discussed, and there was a strong feeling that it ought to be terminated by arbitration, or some other means. So far as argument goes, no doubt the Midland Company has the best of it. Seeing that the subject in dispute has by both parties been referred to Sir J. Karslake, they ought to have been bound by his decision. The Great Northern, however, did not comply, but by means of an arrangement for taking the coal from South Yorkshire to Retford, instead of to Doncaster, as before, evaded an agreement entered into with the Midland in 1863. The coal merchant in many cases is the person most benefited, and as with one or two more eightpenny reductions a serious loss will be the result, it is to be hoped an arrangement will be come to. In Steam Coal only a moderate business is being done. Coal and coke for furnace purposes is in very brisk request, and a large quantity is being sent into Northamptonshire.

The prospect of a termination of the war between France and Prussia has in no way interfered with those branches of the Sheffield trade connected with the production of warlike material. The heavy armour-plate mills are as busy as ever, and makers of steel gun-barrels are also active. Now that the dispute with the American Government as to the invoicing of goods has terminated, a considerable improvement has taken place in the demand for various qualities of steel goods for that country. There is also rather more doing on colonial account, but there is little or no change with regard to the business done for the Continent. Railway material, including rails, points, and similar articles, continues in brisk request. The plate trade, which was unusually active during the frost, has now become very quiet indeed. The dispute in the file trade remains without any alteration, excepting that the Union men have reduced the payments to the Association, so as to increase their numbers.

Trade in South Yorkshire is moderately good, and the ironworks are doing a fair trade in rails, plates, bars, &c. The foundries are

also kept well going, more especially in gas, water, and heating pipes, palisades, doorway heads, and similar goods. In House Coal there is a very brisk demand for London since the reduction of the rate by the Great Northern; and there is also more steam coal going there than for a considerable time past. With a fair rate there is no doubt but a large trade for shipping from the Thames might be done—an important branch, which has been all but closed to the colliery owners of South Yorkshire. There is a better enquiry for hard coal for Hull, and a good trade is being done with Lincolnshire for the furnaces there.

In the West Riding district the ironworks are rather busy, and a considerable trade is being done in boiler-plates, rails, tyres, and axles. Steam-ploughs and other machinery for agricultural purposes is rather active just now, there being some considerable orders on hand for the Continent and the colonies.

COAL MINING UNDER RAILWAYS.—EXTRAORDINARY PROCEEDINGS.—A few days since an extraordinary proceeding took place at the Hall Colliery, belonging to Messrs. Haynes, Lawton, and Ford, and situated quite close to the Silkeston Station of the Manchester, Sheffield, and Lincolnshire Railway, and by which a large number of men were thrown out of work. It appears that some time since Messrs. Haynes and Co. gave the railway company notice that they were about to get the coal near to the rails, giving them the option, as usual, of purchasing it. As the coal to be got was only some 8 or 9 yards from the surface, it is needless to state that it would be highly dangerous for any train passing over the rails if the coal was got on either side of them, let alone underneath. The company did not intimate their desire to buy the coal or otherwise, but sent a number of men to pull the points of the railway siding on to the main line, so that Messrs. Haynes and Co. were deprived of all exit for the coal, and for which they had been paying from 600l. to 700l. a month. A man was then sent to watch the line, to prevent any danger if it is supposed, and a board was placed on the line a day or two ago ordering trains not to go over a certain part at a speed of more than eight miles an hour. The firm, on applying at the offices in Manchester, were not informed as to the reason for the extraordinary step taken by the officials of the company. What protection the public travelling over a line where the coal in the vicinity of the rails is being got at some 8 or 9 yards from the surface is not apparent.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Feb. 9.—There has been an improved feeling in the Iron Trade since the conclusion of the armistice, and rather more orders have been given out by home buyers, but the trade continues generally dull, and in many departments the workmen are far from being fully employed. The exports of iron for January show a falling off amounting to 30 per cent. as compared with last year, a sufficient confirmation of the depression which has existed for some time past in this trade. It is worthy of remark that more than half the decline in railway iron, in which the greatest reduction was experienced, arose from the diminished exports to India, which would hardly have been owing to the war. The demand for rails must be uncertain and fluctuating for a long time to come. It is satisfactory to find that the United States is still a large consumer of this class of iron. The General Hard-ware Trades of South Staffordshire are only moderately active. The Bessemer steelworks of the Patent Shaft and Axle-Tree Company are being largely extended, and the weekly production will now be raised to 300 tons. The decision of Mr. Hughes to reduce wages by 5 per cent. in the Cleveland district, and the notice of a reduction of 10 per cent. in South Wales, has excited great attention in Staffordshire.

At the South Staffordshire and East Worcestershire Institute of Mining Engineers meeting, on Monday evening, the hon. secretary, Mr. Johnson, stated that a report which had been circulated that there had been a great influx of water at the experimental sinking at Sandwell had been greatly exaggerated. They had months ago expected the water now met with, and the winding-engine would be at work in a fortnight, and would at a slight cost overcome this obstacle to the progress of the sinking.

A fatal accident occurred on Saturday, at Mr. Pease's Tileries Colliery, near Tunstall. Five men and a boy were working at the far end of a drift, getting the slag ironstone. A shot was fired, which brought down a great quantity of earth, calculated at from 60 to 70 tons, which fell upon the men. Great exertions were required to rescue them, when three were found dead, and terribly crushed, and the others so severely injured as to leave little hope of their recovery. There was a good supply of timber, but the workings were not sufficiently advanced for it to be applied. A horse was also crushed to death.

The Dudley Correspondent of the *Wolverhampton Chronicle* writes:—The iron trade of South Staffordshire is in by no means a satisfactory condition, and the mills and forges for the most part are only in partial operation. The orders coming in still continue to be chiefly for small sizes, such as rounds, squares, angles, strip, and guide iron, but there are some special sizes ordered in the district for Government purposes. The plate mills are doing only single turns, and in rails scarcely anything is being done. This department of the trade seems to have forsaken the district, or nearly so. Some of the best houses export considerable quantities of the finished workpiece, but in rather a poor condition, and the hopes which were indulged in a short time ago seem not likely to be fulfilled for some time to come. Prices for "marked iron," both best and common, remain firm, but for seconds and more inferior sorts business has been done at lower rates, some bars of fair quality having been sold at 7l. per ton, or 1l. per ton under the list price, and a make containing a larger proportion of cinder at a still lower rate for cash. There continues a fair demand for pig iron, which is probably owing to some of the foundry establishments being in rather a prosperous condition, and in small castings there is a fair business being done. No more furnaces have been blown in yet. The present number in blast is 110, many of which are turning out a large quantity of iron; in some instances the "make" reaches 200 tons per week, in others from 150 to 170 tons per week. Considerable improvements have been lately introduced in some of the furnaces which have been recently erected, both as it regards their capacity and also the economy of iron—less than the large quantities now produced. The demand for thick coal is unparalleled, owing to the severity of the frost, which lasted, with slight intermission, over six weeks. Some of the ironworks which depended upon a supply by water have been brought almost to a standstill, and also many of the large carpet manufacturers at Kidderminster. The canals having now become navigable the demand for coal by boats is very great, and taxes heavily the productive power of the district in order to meet the various requirements.

REPORT FROM MONMOUTH AND SOUTH WALES.

Feb. 9.—It might be observed that the state of affairs on the Continent is this week regarded with less alarm by the ironmasters both of this and other districts, and the result has been that a little more life has been evinced at the markets, and a healthier tone pervades the trade generally. The business transacted, although comparatively small, has been more extensive than was expected. The question whether peace or war will succeed the term of the armistice is, of course, still unanswered, but there are indications that the prevailing opinion is inclining towards the more favourable belief that the conflict will not be resumed. That the prospects of the Iron Trade hang upon this question is more and more obvious, there being no lack of signs that if peace were re-established there would be a plentifulty of orders for finished iron given out, and the make might in a very short time be largely increased. But little change can, however, take place in business until the result of the constituent elections in France are known, and inasmuch as those elections are likely to decide whether there is to be a continuance of the war or not, the proceedings will be watched with considerable anxiety. Notwithstanding the limited specifications coming to hand the works continue in steady operation, and an average number of turns are still made by the men. Speculating to some extent upon the probability of the various momentous questions being satisfactorily solved, some buyers have ventured a few orders of average magnitude during the week, and these will opportunely serve to sustain a degree of activity at some of the rail-making establishments. Amongst them are specifications on account of the Bombay and Baroda Company, and some enquiries on Russian account, such intelligence as can be gleaned in regard to the Black Sea Conference being favourable to the belief that the difficulties there under consideration will be amicably arranged. Only limited purchases still emanate from home sources, so that on home account business in railway iron shows scarcely any improvement. For bars and plates there is still a fair sale reported, and prices are tolerably well maintained. For Pig-iron the demand is not equal to the production, but prices continue firm. The enquiry for Tin-Plates shows some improvement, and better prices are being obtained for some descriptions of make.

In connection with the Steam Coal Trade there is very little fresh to report this week, business remaining in nearly the same position as last week. Both buyers and merchants are looking forward anxiously to the termination of the war, when it is hoped that the usual large purchases will be made on French account. The House Coal Trade shows some movement, and the collieries continue tolerably well employed.

An event which has been hanging over and much dreaded in the district for the last three or four months is at last about to transpire—a reduction of wages at the ironworks. During that period the condition of the rail trade, upon which so much dependence is placed by Welsh makers, has been such as to cause the wages question to be under serious consideration. The fall of prices soon after the declaration of war fully justified the ironmasters in taking immediate steps to carry out a proportionate reduction in wages, but as there were a good many old contracts on the books it was determined not to make any change as long as the old orders

lasted. Subsequently, hopes were entertained that the war would soon be at an end, and that a speedy revival in business and prices would follow. The Black Sea difficulty added to the dulness which prevailed, Russia being such a large user of railway iron that any interference with the demand from that country could not fail to prove a serious blow to the trade. All those difficulties succumbing one another, together with the doubt which still exists as to the prospects of peace, have led to the determination on the part of the masters to give a month's notice of a reduction in wages, which will average about 10 per cent. The notice was posted up at nearly all the works in the district on Saturday, and the reduction will take effect in the first week in March. The views of the workmen on the matter are scarcely yet ascertained, but it is probable that the reduction will be peaceably accepted.

A matter worthy the attention of the Truck Commissioners has just been brought under public notice in the western part of the district. Some time ago it appears the proprietors of the Cwmbrilia Tin Works, near Swansea, hearing so much respecting the system of weekly payments, determined to adopt it as an experiment at their works. The result, as shown by them, has been deplorable, and exceedingly discreditable to the men. The following notice was posted up at the works on Saturday last:—"The proprietors much regret to find that their efforts to promote the well-being of the men have not been appreciated by them. The system of Friday weekly payments has been tried, but the extent of drunkenness which follows, and the consequent loss and inconvenience, compels them to give this notice that they will in future be discontinued, and wages will be paid as formerly—all wages will be paid monthly on Saturday's, with one draw intervening."

Another meeting of the promoters of metal markets for the district has been held at Newport, Mr. G. H. Banks, of the Pontymlster Works, in the chair. The committee appointed to carry out all the preliminary arrangements was strengthened by an additional number of gentlemen connected with the various staple trades. Letters emanating from many districts in the kingdom were read, showing that the proposed markets were considered desirable, and the hon. sec. was instructed to issue another circular with a view to obtaining wider and more general support of the markets. Communications were also read disapproving of the intention to hold the markets on alternating days, as it would lead to serious trouble and inconvenience. It was, therefore, resolved, after due consideration, "That the weekly metal markets shall be held at Newport on Wednesday, and at Swansea on Saturday, the first market to be held at Swansea, at the Mackworth Arms Hotel, on Saturday, March 4."

In nearly every instance a favourable increase is shown in the dividends just announced by several of the local railway companies for the past half-year. The Taft Vale will divide their usual 10 per cent., being the same rate of dividend as for the two previous half-years. The net revenue of the Rhymney will admit of a distribution at the rate of 3 per cent., as compared with 2½ in the previous, and 2 in the corresponding half-years. Ten per cent. per annum is to be paid by the Sirhowy, with a large balance to carry forward. A dividend of the rate of 10 per cent. per annum is announced by the Bristol and South Wales Railway Wagon Company (Limited).

The arrivals at Swansea include—the Victor Emeline, from Bordeaux, with 125 tons of pitwood, for C. H. Walters; Aigle, from Bilbao, with 140 tons of iron ore, for Holway Brothers; Esther and Gabriell, from Bilbao, with 228 tons of iron ore, for the Dowlais Iron Company; Deux Assolres, from Bilbao, with 130 tons of iron ore, for T. Wood and Company; Dartagnan, from Bordeaux, with about 150 tons of pitwood, in bulk, for J. Dowle Jones; Muse, from Bilbao, with 130 tons of iron ore, for Messrs. Cory Brothers, Cardiff; Anna Agathe, from Limpas, with 170 tons of zinc ore, for Messrs. Richardson and Company; Louise Desdres, from Bordeaux, with about 100 tons of pitwood, in bulk, to order; Maria, from Bordeaux, with 105 tons of pitwood, for Destre and Mesnier; Leonora, from Bordeaux, with 180 tons of pitwood and 20 packages of old copper, to order; Jenno Eugene, from Limpas, with 140 tons of zinc ore, for Richardson and Company; Gethsemane, from Oporto, 140 tons of copper ore, with 160 tons of ore, for Richardson and Company, 134 tons of copper ore, 3 tons of nickel ore, and 25 tons of lead ore; Demosthenes, from America, with 80 tons of copper ore, for A. A. Bell, Swansea; Constance, from Huvela, with 297 tons of pyrites of sulphure, for Burgess and Chaddick; Beola, from Cagliari, with 340 tons of zinc ore, for Richardson and Company; Hebe, from Santander, via Sully, with 120 tons of iron ore, to order; Amiable Rose, from Santander, with about 150 tons of iron ore, in bulk, for Henry Bath and Son; Doug Freres, from Port Lannay, with 75 tons of pitwood, for David Evans; Jenny No. 2, from Bordeaux, with 85 tons of pitwood, in bulk, to order; Rose of England, from Caldera, with 1137 bags of silver ore, 862 bags of silver regulus, and 405 tons of copper regulus, for H. Bath and Son.

RAILWAY TRAFFIC IN SOUTH WALES.—THE NARROW GAUGE.—As representing the interests of the staple trades of the country, we have strenuously advocated the laying down of the narrow gauge as the best means of facilitating the transit of heavy minerals, more especially in mountainous districts, such as that of South Wales. We have often contended that the narrow gauge over the Great Western system is absolutely essential to properly develop the almost unlimited resources of the district, and we are more than ever convinced that the adoption of the broad gauge would be a most serious and permanent injury to the large iron makers, and the commercial community generally have ever since concurred. The opinions which we have repeatedly given expression to have been almost unanimously endorsed by the whole trading community of South Wales, and some years since a petition was presented to the board of directors of the Great Western Railway, signed by almost every firm of any standing, in favour of the narrow gauge over that of the broad gauge. Repeated applications have since been made to the same effect, but the condition of the district, the depression of trade, the state of railway matters, and other causes have conspired to render the adoption of the narrow gauge almost impossible up to the present time. We believe we may venture to predict the dawn of better times; for if the information which we have received be correct (and from the sources of our information we have every reason to believe its authenticity and correctness) the directors of the Great Western Railway Company have just decided to make their system narrow gauge, excepting only that portion of the line between the metrop. N. and the same effect, which will remain broad, with a third rail. That the whole of the staple trades of the South Wales district will receive a most gratifying and substantial impetus no one acquainted therewith will venture to question, and that the step now resolved upon by the directors of the Great Western board will ultimately eventuate to the interests of the shareholders there is every reason to hope and believe. At all events, the South Wales district has for many years past yearned for this boon of the narrow gauge, and the determination of the directors of the Great Western Company proves that at length they are alive to the interests of the trades of the district, and also those of their shareholders.

MINING AND ITS PROSPECTS.—The following remarks appear in Messrs. Powell, Dixon, and Co.'s February issue of the "Share Exchange Times." The Mining Share Market has for some weeks past manifested unmistakable symptoms of material improvement, and indeed generally from the healthier tone of the metal market, and in several special cases from important discoveries having been made. The past year—as most of us know to our cost—has been one of war, adversely affecting the value of every security, not excepting Consols, which fluctuated from the highest to the lowest point no less than 6 per cent.; whereas during 1869—a year of peace—the fluctuation did not exceed 2 per cent. During the year the market value of mine shares has largely advanced in the general depression, but, nevertheless, the amount paid in dividends by the British mines in 1870 contrasts favourably with 1869, being 330,855l. against 315,800l. The dividends paid by foreign mines, however, during the same period does not bear such a favourable comparison, owing to Don Pedro (gold) mine having paid only 15,232l. against 61,600l. in 1869. Pontgibaud also paid 17,700l. in 1869, and only 5916l. in 1870; but Cape Copper paid 11,250l. in 1869, against 7500l. in 1870.

These statistical facts show plainly enough that, so far as British dividend-paying mines are concerned, whatever extent their stock value may have been affected in sympathy with other securities, the actual amount paid in dividends to the respective proprietors exceeds that of the preceding year. It is for this reason that we urge the present as the most opportune period for the selection and purchase of shares in some well-conducted dividend-paying mines, because there can be no doubt whatever that, apart from the improvement that will assuredly ensue in value generally upon the announcement of peace, mine shares will be especially benefited by reason of the increased profits resulting from an advance in the price of metals, which may be confidently looked for as soon as the continental trade assumes its normal proportions. Too much caution, however, cannot be exercised in making the selection, whether it be in dividend or progressive mines, or whether for investment or speculation.

As a rule, progressive mines—that is, mines not yet developed to a profitable condition—offer much greater chances of realising profits by advancing quotations than mines yielding regular dividends, although it is not an unimportant consideration for the latter to advance in a comparatively rapid rate, or 10 or 20 per cent. in market value, as has been the case in many instances within the last few months. By watching these fluctuations the prudent investor realises, so to speak, a double dividend, by selling out upon the rise and re-purchasing upon the reaction which is almost sure to take place, for reasons which we will fully explain upon some future occasion.

DR. MONS. AUGUSTE MICHEL—whose name will be familiar to readers of the *Mining Journal* in connection with gold mining operations in New Granada, South America, and the exploration of the Chaudiere and Nova Scotia gold regions, the latter on behalf of the Geological Survey of Canada—died at Montreal on Jan. 14 last, at the age of 65, from the effects of a fall on a slippery pavement. The deceased had been a capitalist in the French army, but in the last twenty years in gold mining, on which he was considered a great authority. He was the soul of honour, and his death is mourned by the officers of the survey and by a large circle of acquaintances.

BREAKFAST.—EPPS'S COCOA.—GRATEFUL AND COMFORTING.—The very agreeable character of this preparation has rendered it a general favourite. The *Civil Service Gazette* remarks:—"By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition, and by a careful application of the fine properties of well-selected cocoa, Mr. Epps has provided our breakfast tables with a delicately flavoured beverage which may save us many heavy doctors' bills." Each packet is labelled—JAMES EPPS AND CO., Homoeopathic Chemists, London. Also, makers of Epps's Cacaoine, a very light, thin, evening beverage.

MR. JOHN POOLE, ENGINEER, HAYLE, CORNWALL.—Having had thirty years' experience in the leading manufacturing of the county, is in a good position to procure NEW and SECONDHAND ENGINES, and MINING MACHINERY IN GENERAL, for Foreign and Home Mines. Inspections and valuations attended to.

TREVARRACK MINING COMPANY.—The opinions of the following mining captains, James Pope, late of Wheat Basset, Cornwall; Harry of Great West Vore, — Michael, of New Treleick, W. Virlian, of Camborne, James Evans, of St. Agnes, H. James, late of Redruth, — Doldge, of Callington, and other well-known authorities, may be obtained of Mr. L. F. BELLOTT, 20, Canonbury Villas, Islington, N.

Royal School of Mines, Jermyn Street.

PROFESSOR GOODEVE, M.A., will commence a **COURSE OF THIRTY-SIX LECTURES, ON APPLIED MECHANICS**, on Tuesday next, the 14th of February, at Twelve o'clock, to be continued on each succeeding Wednesday, Thursday, and Tuesday, at the same hour. Fee for the course, £3.

Professor RAMSAY, LL.D., F.R.S., will commence a **COURSE OF THIRTY-SIX LECTURES, ON GEOLOGY**, on Tuesday next, the 14th of February, at Two o'clock, to be continued on each succeeding Wednesday, Thursday, Monday, and Tuesday, at the same hour. Fee for the course, £3.

TRENHAM REEKS, Registrar.

J. TAYLOR AND CO., SHAREDEALERS, MINE AGENTS, &c.,
MINING EXCHANGE, SOUTH KING STREET,
MANCHESTER.

EXTRAORDINARY DISCOVERY OF LEAD ORE.

EAST LLANGYNOG MINING COMPANY (LIMITED).

This mine continues to improve, and as it is now altogether out of the category of speculative mines, presents a very rare opportunity for investment. We can strongly recommend it to the investing public as a mine out of which very large profits may be made. We invite capitalists and others who wish to realise large profits to inspect the stones of solid lead ore now on view at our offices at the above address, weighing from 1 cwt. to 6½ cwt., out of a lode valued at £100 per fm. There are five other powerful and well-defined lodes, two or three of which are in good ore, one yielding 2½ tons per fm. Taking into consideration the short time the company has been in existence, we do not know another in the kingdom presenting advantages anything approaching this mine.

We strongly recommend our friends at once to purchase the shares at the present low price at which they are offered, as we feel fully convinced that they will soon realise five or six times their present price.

The mine has been inspected by four or five first-class mining engineers—among whom is Capt. Thomas, the agent for the celebrated Llangynog Mine, which has paid in royalty alone over £800,000, and raised ore to the value of more than £6,000,000 sterling—all of whom agree that it is likely to become a lasting dividend-paying mine. Capt. Thomas and Capt. Julian—both of whom have had great experience in Welsh mining—consider it to be one of the best mines in the Principality of Wales.

Over 50 tons of lead ore is now broken, and would have been on the market by this time but for the severe frost preventing crushing and dressing operations. However, in about a fortnight or three weeks after the frost has disappeared this large pile of ore can be prepared. The lodes are opening up remarkably well, one of which is over 6 ft. wide, and there is every indication of this mine becoming one of the richest in the Principality.

A few shares may now be obtained, at £2 10s. per share, by early application to Messrs. J. TAYLOR and Co., Mining Exchange, South King Street, Manchester.

J. TAYLOR and Co. have also FOR SALE A FEW SHARES IN THE CWM RICKET LEAD MINING COMPANY (LIMITED). At £4 per share. At this mine the water-wheel, drawing machine, and crushers, which have for some time past been under preparation, are now nearly completed, and it is expected that sales of ore will very soon be made. Dressing operations have been going on for some time past.

The Cwm Ricket is in close proximity to the Van Mine, the shares of which have within a very short time advanced from £4 5s. to over £5 5s. per share.

MR. THOMAS SPARGO, STOCK AND SHAREDEALER,
224 AND 225, GRESHAM HOUSE,
OLD BROAD STREET, LONDON, E.C.

COPPER ORES.

Sampled Jan 18, and sold at Swansea, Feb. 7.

Mines.	Tons.	Produce.	Price.	Mines.	Tons.	Produce.	Price.
Cape Ore.....	61	28½	£18 12 0	Berchaven.....	83	.....	£5 8 0
ditto.....	61	28½	18 10 0	ditto.....	106	.....	5 6 0
ditto.....	60	28½	18 10 0	Paramatta.....	66	14½	9 10 0
ditto.....	78	28½	18 10 0	ditto.....	65	14½	9 10 0
ditto.....	47	27½	18 1 0	ditto.....	62	14½	9 10 0
ditto.....	47	27½	18 2 0	ditto.....	60	15	9 12 0
ditto.....	46	28	18 5 0	Moonta.....	110	14	9 1 0
ditto.....	1	34½	22 10 0	ditto.....	107	14	8 18 6
ditto.....	63	28	18 5 0	Knockmahon.....	110	.....	2 4 6
ditto.....	62	28	18 4 0	ditto.....	127	.....	3 18 6
ditto.....	61	28	18 7 0	Copper Ore.....	37	43½	28 2 0
ditto.....	60	28	18 7 0	ditto.....	15	20½	17 0 0
ditto.....	60	28	18 8 0	ditto.....	10	12½	7 13 0
ditto.....	60	28	18 8 0	ditto.....	32	5½	7 13 0
ditto.....	16	28	18 6 0	Ballycumiskil.....	8½	5	5 0 0
ditto.....	8	28	18 3 0	ditto.....	5	7½	4 7 0
ditto.....	1	28½	18 6 0	C. Ore.....	9	20	12 13 0
Berchaven.....	118	.....	5 6 0				
ditto.....	60	.....	5 6 0				

TOTAL PRODUCE.

Cape Ore.....	730	£18,395 11 6	Knockmahon.....	237	£ 743 4 6
Berchaven.....	367	1,950 9 0	Copper Ore.....	94	1,461 14 6
Paramatta.....	253	2,414 6 8	Ballycumiskil.....	46	226 15 0
Moonta.....	217	1,950 9 0	C. Ore.....	9	113 17 0

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Names.	Tons.	Amount.
Copper Miners' Company.....	354½	£3101 2 3
P. Grenfell and Sons.....	204½	2594 9 6
Stims, Williams, and Co.....	315	3353 18 0
Vivian and Sons.....	207½	2777 10 6
Williams, Foster, and Co.....	318	5973 6 0
Mason and Elkington.....	300	3998 11 6
Charles Lambert.....	53½	477 9 9

Total..... 1953 £22,256 7 6
NO SALE on February 28.

TOTALS AND AVERAGES.

Wholesale.....	173½	£11 8 0	Per unit.....	12s. 10d.	Standard.....	£8 7 6
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COPPER ORES.

Sampled Jan. 18, and sold at Tabb's Hotel, Redruth, Feb. 2.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
West Tolgus.....	80	£4 2 0	Crenver & Abraham.....	55	£2 12 6
ditto.....	73	4 2 0	ditto.....	52	2 18 6
ditto.....	42	4 6 0	South Crofty.....	81	2 0 6
ditto.....	59	3 17 6	ditto.....	60	1 16 6
ditto.....	38	4 1 6	ditto.....	34	2 5 0
ditto.....	42	4 1 6	ditto.....	27	1 7 6
West Seton.....	66	7 10 0	ditto.....	15	6 17 6
ditto.....	54	6 6 6	North Trekerby.....	72	5 10 6
ditto.....	52	3 4 6	ditto.....	67	5 10 6
ditto.....	44	3 0 6	ditto.....	49	4 18 6
ditto.....	44	5 10 6	ditto.....	82	2 10 6
ditto.....	40	2 9 6	ditto.....	36	2 9 6
East Grenville.....	63	1 14 6	ditto.....	28	2 9 6
ditto.....	54	2 7 6	North Crofty.....	78	6 12 6
ditto.....	50	2 7 6	ditto.....	26	5 4 6
ditto.....	49	5 3 0	Wheal Bassett.....	43	5 11 6
ditto.....	44	6 12 0	ditto.....	28	4 17 6
ditto.....	40	6 2 0	East Carn Brea.....	34	4 13 0
Wheal Seton.....	50	6 2 0	ditto.....	18	3 1 6
Pendarves.....	46	3 5 0	Clifford.....	16	2 6 6
ditto.....	45	3 14 6	ditto.....	15	2 6 6
ditto.....	40	3 6 0	Wheal Jewell.....	15	3 9 6
ditto.....	38	1 10 0	ditto.....	11	2 18 6
ditto.....	34	5 6 6	ditto.....	9	4 12 6
Carn Brea.....	15	1 5 6	Levant.....	29	9 3 0
ditto.....	61	3 12 6	Pennance.....	1	25 0 0
ditto.....	58	4 5 0	Dolcoath.....	24	2 1 6
ditto.....	56	3 2 0	East Bassett.....	10	4 16 6
ditto.....	41	3 5 0	ditto.....	9	2 0 6
ditto.....	27	8 0 6	Emily Henrietta.....	9	4 6 6
ditto.....	11	1 7 6	Boscawell.....	3	33 1 0
Crenver & Abraham.....	57	1 15 6	Penden Consols.....	2	8 11 0
ditto.....	56	3 6 0			

TOTAL PRODUCE.

West Tolgus.....	375	£1531 8 6	East Carn Brea.....	72	£213 9 0
West Seton.....	305	1467 12 6	Clifford.....	43	110 13 6
East Grenville.....	275	928 8 6	Wheal Jewell.....	35	125 6 0
Wheal Seton, &c.....	268	1092 11 0	Levant.....	29	291 1 6
Carn Brea.....	254	1096 5 0	Pennance.....	24	49 16 0
Crenver & Abraham.....	220	882 9 0	Dolcoath.....	18	59 17 0
South Crofty.....	217	490 5 0	East Bassett.....	10	49 13 0
North Trekerby.....	188	1009 6 0	Emily Henrietta.....	9	43 0 0
East Pool.....	140	356 7 0	Boscawell.....	3	99 3 0
South Crofty.....	114	632 12 0	Penden Consols.....	2	17 3 0
Wheal Bassett.....	71	376 4 6			

Average standard..... £102 2 0
Average price per ton..... £4 0 0
Quantity of ore..... 2645 tons
Quantity of fine copper..... 174 tons 11 cwt.
Amount of money..... £16,548 1 6
LAST SALE.—Average standard..... £10 0—Average produce..... 6½
Standard of corresponding sale last month, £9 14 0—Produce, 7½.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Names.	Tons.	Amount.
Vivian and Sons.....	503	£1899 7 6
Grenfell and Sons.....	440	2574 7 6
Stims, Williams, and Co.....	4	124 3 0
Williams, Foster, and Co.....	316	1417 14 0
Mason and Elkington.....	226	1854 5 6
Copper Miners' Company.....	206½	728 15 3
Charles Lambert.....	123	129 6 6
Newton, Keates, and Co.....	149	659 17 0
Sweetland, Tuttle, and Co.....	377½	1140 5 3

Total..... 2645 £10,548 1 6
NO SALE on Thursday next, Feb. 16.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WHEAL POLNEMAR MINING COMPANY.—By the direction of His Honor the Vice-Warden, notice is hereby given that, on Wednesday, the 22nd day of February inst., at the hour of Eleven of the clock in the forenoon, at the Registrar's Office, at Truro, within the Stannaries of Cornwall, this Court will PROCEED TO MAKE A CALL OF THIRTEEN SHILLINGS PER SHARE on all the Contributors settled on the List of Contributors of the above-named company as present members of the company.

All persons interested therein are entitled to attend at the time and place aforesaid to offer objections to such call.

FREDERICK MARSHALL, Registrar.
Dated Registrar's Office, Truro, the 7th day of February, 1871.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WHEAL CHERY MINING COMPANY.—By direction of His Honor the Vice-Warden, Notice is hereby given that, on Tuesday, the 21st day of February instant, at Eleven o'clock in the forenoon, at the Registrar's Office, Truro, in the county of Cornwall, this Court will proceed to MAKE A CALL OF FIFTEEN SHILLINGS PER SHARE on all the contributors of the above-named company, settled as present members thereof, on the List of Contributors of the said Court.

All persons interested therein are entitled to attend at the time and place aforesaid, to offer objections to such call.

FREDERICK MARSHALL, Registrar.
Dated Truro, February 8, 1871.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the CAMBORNE VEAN MINING COMPANY.—By an order made by His Honor the Vice-Warden of the Stannaries, in the above matter, dated the 24th day of February instant, on the petition of William Michell Grylls, of Redruth, within the said Stannaries, gentleman, a contributor of the said company, IT WAS ORDERED that the said CAMBORNE VEAN MINING COMPANY should be WOUND-UP by this Court under the provisions of the Companies Act, 1862.

(Agents for S. T. G. Downing, Redruth, Solicitor for the Petitioner.)
Dated Truro, February 2, 1871.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the CAMBORNE VEAN MINING COMPANY.—Notice is hereby given, that ALL CREDITORS of the ABOVE-NAMED COMPANY are REQUIRED, on or before Wednesday, the 22nd day of February instant, to SEND IN their NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of their SEVERAL CLAIMS on the said company, to—
FREDERICK MARSHALL, Esq., Registrar of the said Court at Truro.
Dated Truro, February 7, 1871.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the TREVENEN and TREMENEHUR UNITED MINING COMPANY.—ALL CREDITORS or CLAIMANTS of the ABOVE-NAMED COMPANY, who have not received notice from the Registrar of the said Court that their claims have been already admitted, are hereby REQUIRED TO COME IN and PROVE their SEVERAL DEBTS or CLAIMS at the Registrar's Office, Truro, on Monday, the 20th day of February instant, at Eleven o'clock in the forenoon, or in default thereof they will be EXCLUDED from the BENEFIT of any DISTRIBUTION made before such proof. And for the purpose of such proof they are to attend in person, or by their solicitors or competent agents, or (if less than attendance be required by the Registrar) send in their affidavits of their several debts or claims to the Registrar of the Court, at Truro, such affidavits being sworn before some Commissioner of the said Court, or before any Court Judge, Justice, or any Commissioner of one of the Superior Courts, lawfully authorised to take and receive affidavits and affirmations.

FREDERICK MARSHALL, Registrar of the above-named Court, Truro, Cornwall.
Dated Truro, the 7th day of February, 1871.

TURTON, NEAR BOLTON, LANCASHIRE.
SALE OF THE WELL-KNOWN TURTON MOOR COLLIERY AND FIRE-CLAY WORKS, now in active operation, with all the EXTENSIVE ERECTIONS, valuable PLANT and MACHINERY, TRAM-ROAD, &c., belonging thereto, including the LESSEE'S INTEREST in the COAL and FIRE-CLAY under about 400 acres of land.

MESSERS. WM. LOMAX, LOMAX, SONS, AND MILLS respectfully announce that they are instructed by the Trustees under the will of the late Robert Heywood, Esq., to OFFER BY PUBLIC AUCTION, on Wednesday, the 15th day of February, 1871, at Five or Six o'clock P.M. most punctually, at the Three Crowns Inn, Deansgate, Bolton (if not in the meantime disposed of by private treaty), subject to such conditions as shall be then produced, the LESSEE'S INTEREST in the TURTON MOOR COLLIERY and in all that COLLIERY and FIRE-CLAY BRICK WORKS, known as

TURTON MOOR COLLIERY.

Situate at TURTON, five miles from BOLTON, immediately adjoining the turnpike road leading from Bolton to Over Darwen and Hindburn, with the main house, cart set, tramroad, office, workshops, grinding and drying sheds, kilns, chimneys, and other erections, and the whole of the mines or beds of coal and fire-clay under 400 statute acres or thereabouts of land, at Turton Moor; together with the valuable STEAM ENGINES for winding, pumping, and grinding purposes, with the BOILER, SHAFT FITTINGS, TRAMWAYS, WEIGHING MACHINE, GRINDING MILL, and other MACHINERY and PLANT in and upon the premises, a schedule of which will be produced at the time of sale. The colliery is opened out by a winding shaft and an air shaft about 32 yards in depth, with roadways driven therefrom, and the mines have been proved to be of excellent quality, the produce commanding ready sale in the district.

The colliery is held by lease, dated the 16th March, 1870, for the unexpired residue of a term of twenty-eight years and three quarters, commencing on the 25th day of December, 1867, subject to the yearly footage rent of £50 per foot per Lancashire acre of 7840 square yards for the coal, and to an acreage surface rent of £20 per superficial Lancashire acre, irrespective of the thickness, for the fire-clay, such footage and acreage rents to yield a minimum yearly rent of £120 during the said term, and to the covenants and conditions in the said lease contained.

A plan of the workings may be seen, and particulars with other information may be had by applying to Mr. JOHN CROSS, Mining Agent, Cross-street, Manchester; or to Messrs. RUSHTON and ARMITAGE, Solicitors, Bolton, at whose offices a plan of the workings of the mines, and a copy of the lease, may be seen. Bolton, January 16th, 1871.

SALE BY AUCTION.

MR. JOHN WHITE, of 12, Cases Street, Clayton Square, Liverpool, will, under instructions from the Liquidator of the South Barrule Slate Quarry Company (Limited), in liquidation, OFFER FOR SALE, BY AUCTION, at the Law Association Rooms, 14, Cook-street, Liverpool, on Wednesday, the 1st day of March, 1871, at Half-past One o'clock P.M., exact time, the LEASE, direct from the Crown, of the well-known

SOUTH BARRULE SLATE QUARRY.

Situate in the parishes of PATRICK and MALEU, in the ISLE OF MAN. The grant comprises 623 acres or thereabouts, and is for a term of 21 years, from the 10th of October, 1862, at a rent of £1 per annum, and a royalty of 1-12th of all slate and other stones gotten, and a dead rent merging in royalty of £50 per annum.

Upwards of £29,000 have been expended in the development of this quarry, which produces excellent roofing slates for which there is a large demand in the Island.

The property is approached by good roads, and is within five miles of a shipping port. It is also well supplied with water power, and contains an extensive body of metal now exposed.

The rails, wagons, machines, implements, and stock of slate will be included in the sale.

For further particulars and conditions of sale apply to Mr. J. S. JACKSON, Ramsey, Isle of Man; Mr. JOHN CHRYSTAL, Surveyor, Ramsey; to the Auctioneer; or to Messrs. POOLE and HUGHES, Solicitors, 2, New-square, Lincoln's Inn, London, at whose chambers the original lease may be inspected.

A copy will also lie for inspection at the office of Mr. CHRYSTAL, Ramsey, Isle of Man.

PRELIMINARY NOTICE.

IMPORTANT SALE OF VALUABLE MACHINERY FOR MINING PURPOSES.

MESSERS. CHURTON AND ELPHICK have received instructions TO SELL, BY AUCTION, towards the end of the present month, at the MAES-Y-SAFN MINE, near MOLD, a large quantity of MACHINERY, comprising LARGE PUMPING ENGINES and BOILERS; also WINDING ENGINES, with gear attached, and a large quantity of PUMPWORK of various sizes, RAILS, and PLANT of all kinds.

Apply to Messrs. CHURTON and ELPHICK, at Chester and at Whitechurch, Salop.
Dated Chester, February 2, 1871.

MINERAL PROPERTY TO LET IN GLAMORGANSHIRE, SOUTH WALES.

THE SEAMS OF COAL AND IRON ORE under an area of 640 acres. A line of railway connected with the Great Western runs through the property, and it is within an easy distance of two good shipping ports. It has also a good stream of water running through for about a mile, and is consequently well adapted for the carrying on of Tin or Iron Works.

For particulars, apply to R. BEDINGTON, Esq., Mining Engineer, Aberdare.

MINERALS TO LET.—THE SEAMS OF COAL, IRON ORE, and CLAY, under a property of from 400 to 500 acres in extent, situate about nine miles from SWANSEA, and near a turnpike road, canal, and railway.

Apply to Mr. E. J. BEON, Estates Office, 21, College-street, Swansea.

At PENNANT MINE, near ST. ASAPH, FLINTSHIRE.

TO BE SOLD, BY PRIVATE TREATY, in order to close the works, a very valuable 30 in. single-acting condensing PUMPING ENGINE, upon the Cornish principle, with equal beam, working 8 ft. stroke, with first length of main rod attached to the beam, all in first-class working condition; made by the Rhydyrnwyl Foundry Company.

Tubular BOILER, with single tube, 30 ft. long by 6 ft. diameter, with all the necessary fittings and sundry feet of steam piping, all in good working condition.

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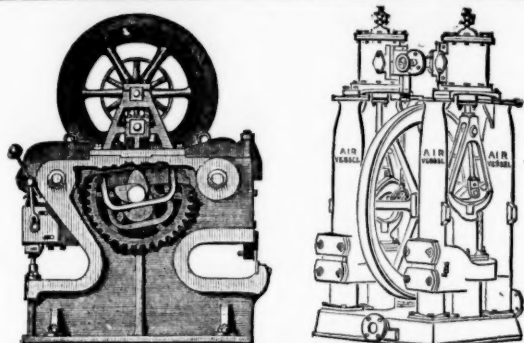
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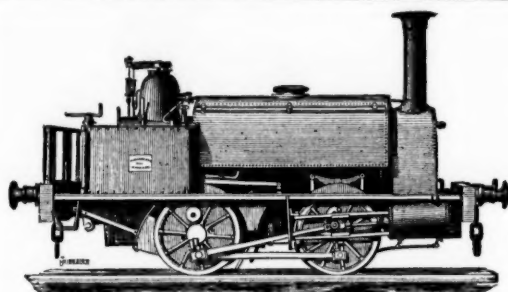
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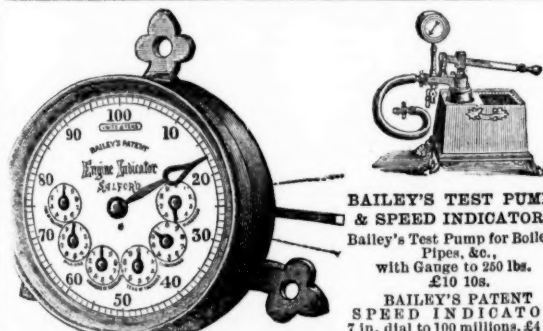
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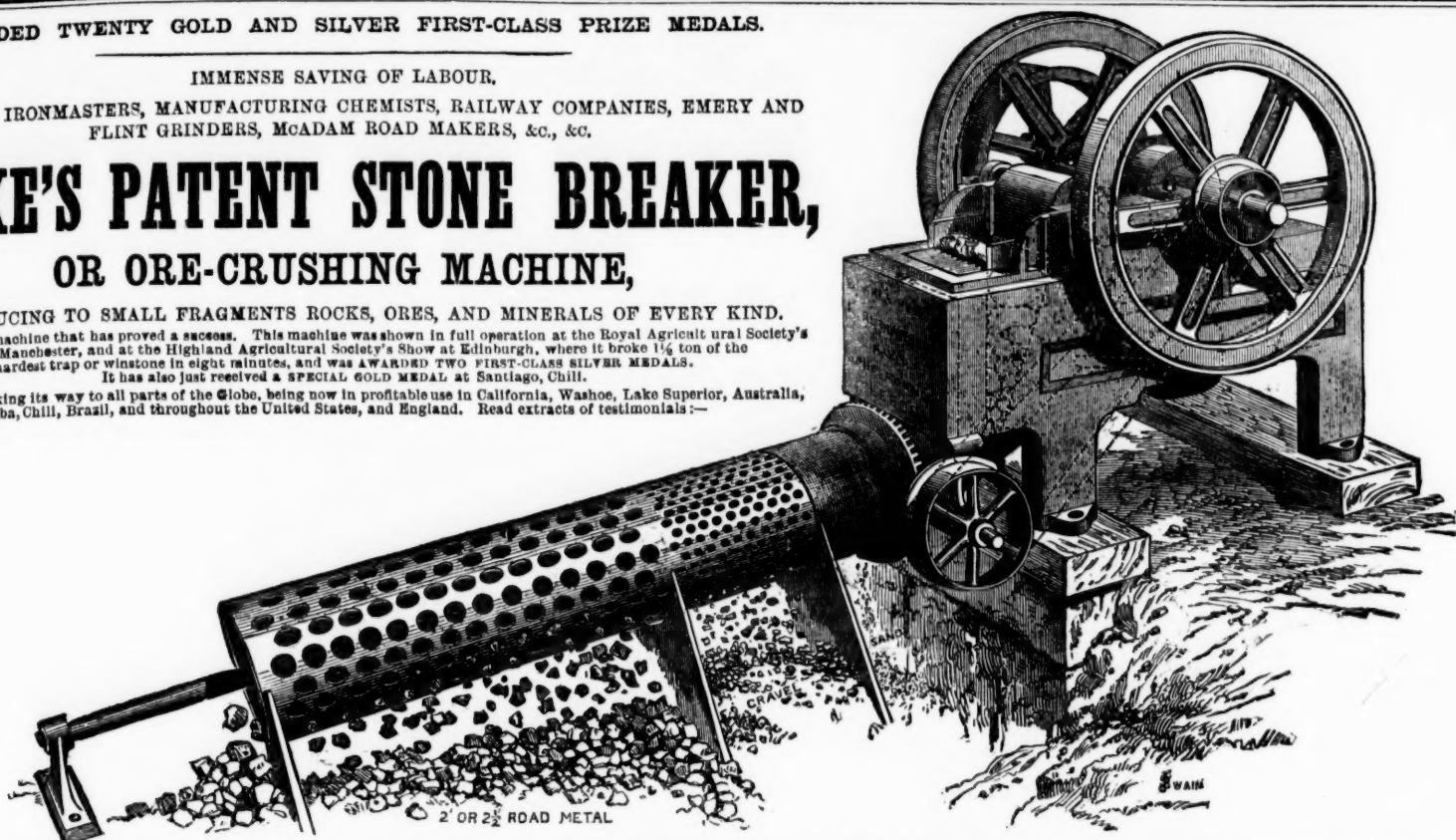
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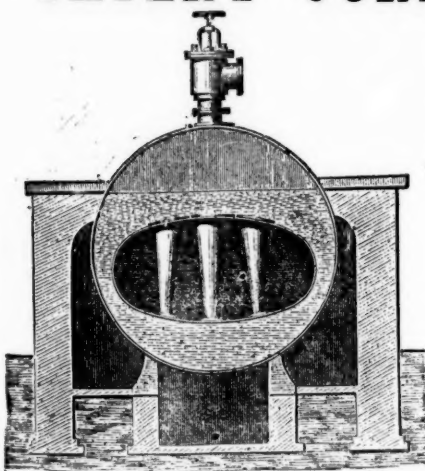
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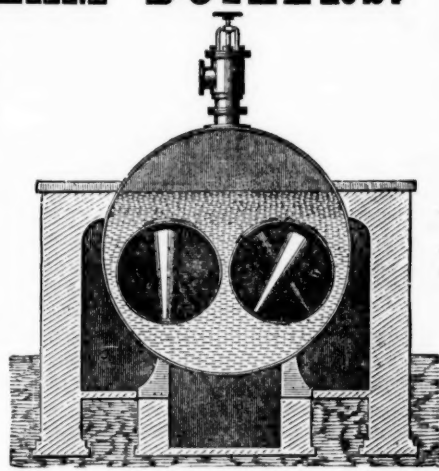
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THE CITY EXCHANGE MINING AND INVESTMENT OFFICES, 32, NEW BROAD STREET, LONDON, E.C.

ALFRED FISHER, MANAGER.

The TERRAS TIN MINE shares investors will do well to buy. We have only 45 that we can offer for sale at £3 each. Apply at once. This mine will soon rank amongst the best dividend-paying mines in the West of England. We are advised of another parcel of tin just sold at £70 15s. per ton, and the largest parcel for any month previously sold, and at the highest price. This augurs well for future dividends. Tin has advanced £9 per ton. This looks well for TERRAS, and from its prosperity mining sets are being applied for all around it.

We advise the immediate purchase of shares in the EAST LLANGYNOG MINING COMPANY (Limited), at £2 10s. each. From the discoveries of ore already made it is believed this mine will commence returning ore at once. We hear that they will sell 40 tons—their first parcel, now preparing for the market—and early dividends are expected.

ABERDAUNANT.—The recent discovery of lead in this mine is holding out well. The ledge will yield 4 tons of lead per fathom. Business promptly transacted in every available security.

The following shares should be purchased:—TAQUARIL, ABERDAUNANT, GEI-FRAN, TANKERVILLE, DEVON CONSOLS, and GREAT VOR shares.

MR. R. PERCY ROBERTS, FINANCIAL AGENT,
60, ENGLISH STREET, CARLISLE.

GLASGOW AND CAPE BRETON (NOVA SCOTIA) COAL AND RAILWAY COMPANY (LIMITED).

Registered under the Companies Acts, 1862 and 1867.

Authorized by Act of the Nova Scotia Legislature, who have granted a Lease of a Square Mile of Coal Field as a Bonus to Construct the Railway.

Capital £100,000, in 10,000 shares of £10 each.

£1 per share on application, £2 per share on allotment, and further calls at intervals of not less than two months.

Should no allotment be made the amount of deposit will be returned without deduction.

DIRECTORS.

HORATIO L. MICHOLLS, Esq., Southgate House, Southgate—CHAIRMAN.
THOMAS B. BAKER, Esq., C.B., R.N., Chief Inspector of Machinery, and late Chief Engineer of H.M. Dockyard, Chatham, 6, Wickham-terrace, New Cross.
WILLIAM MARTINEAU, Esq., M.L.C.E., 39, Princes-square, Hyde Park.
HERBERT HEATH, Esq., Lynnwood, Beckenham.
Captain POWELL, C.B., R.N., Bramhope Lodge, Charlton, S.E.

ENGINEER—JAMES SAMUEL, Esq., M.L.C.E., 26, Great George-street, Westminster.

BANKERS—IMPERIAL BANK (Limited), Lothbury.
BROKERS—MESSRS. FENN AND CROFTWATTE, 50, Threadneedle-street.

OFFICES—5, GREAT WINCHESTER-STREET-BUILDINGS, GREAT WINCHESTER-STREET, E.C.

ABRIDGED PROSPECTUS.

As this line will have very favourable gradients, and coal for fuel is very cheap, and the rolling stock will be so constructed that the dead weight of the trains will be reduced to the minimum consistent with safety and durability, the traffic may be worked at an outside cost of 33 per cent., or one-third of the gross receipts of the carriage of coal, or 1/4d. per ton per mile, leaving a profit on the carriage of £19,167, and from sale of the reserve coal £15,000, making together a net revenue of £34,167, or 34 per cent. on the proposed capital of the company.

Prospectuses, maps, extracts of report, and forms of application for shares can be obtained at the offices of the company, bankers, brokers, and solicitors.

GLASGOW AND CAPE BRETON (NOVA SCOTIA) COAL AND RAILWAY COMPANY (LIMITED).—THE SUBSCRIPTION LIST WILL BE CLOSED FOR LONDON ON TUESDAY the 14th inst., and on WEDNESDAY the 15th inst., for THE COUNTRY. WALTER WRIGHT, Secretary, 5, Great Winchester-street-buildings, London, Feb. 8, 1871.

THE CWM VRON LEAD MINING COMPANY (LIMITED).

Capital £30,000, divided into 12,000 shares of £2 10s. each.

Deposit on application, 5s. per share; on allotment, 5s. per share.

The first call will be 20s. per share, with twenty-one days' notice. Share warrants fully paid-up, and transferable to bearer, can be issued if desired.

To be registered under the Companies Acts of 1862 and 1867.

All deposits will be promptly returned if no allotment is made.

DIRECTORS.

ALEXANDER BOYLE, Esq., 31, Pall Mall, London, and Milltown House, Dublin.

FRANZ J. HESELTINE, Esq., 4, Park Place, St. James Street, London.

CAPT. JAMES H. MORRELL, Woodchurch, near Ashford.

GEORGE F. CARLYON-SIMMONS, Esq., 79, Upper Thames Street, London, and Trevelia, Cornwall.

BANKERS—THE ALLIANCE BANK (LIMITED) Bartholomew-lane, London.

CONSULTING ENGINEERS.

MESSRS. SHELFORD AND ROBINSON, 7, Westminster-chambers, Victoria-street, S.W.

SECRETARY (pro tem).—MR. C. QUARTERMAINE.

OFFICES (PRO TEM).
2, PINNER'S COURT, OLD BROAD STREET, LONDON.

This company is formed to purchase the leases and continue the workings of a most important lead mine situated about 3 miles from the Van Mine, and about the same distance from the town of Llanidloes.

Full prospectuses and reports by Messrs. Shelford and Robinson, C.E. Capt. J. Morrell, J. Richards, R. Northey, John Kitto, and others, together with plans and forms of application for shares can be obtained from the secretary at the offices of the company.

JOHN BOURNE AND CO., ENGINEERS, SHIPBUILDERS, AND CONTRACTORS,

BLOWING ENGINES, WINDING ENGINES,
Bourne's Patent Spherical Governors, Bourne's Patent Feedwater Heaters,
Bourne's Patent Gas Furnaces, Bourne's Patent Coal-dust Furnaces,
PUMPING ENGINES, STEAM BOILERS.

66, MARK LANE, LONDON.

THE GREAT WESTERN HOTEL

(Snow Hill Station),
BIRMINGHAM.

"One of the most elegant, comfortable, and economical Hotels in the three kingdoms."—The Field, July 31, 1869.

THE QUEEN'S HOTEL, ABERYSTWTH.

Mn. JOSEPH MANN, Working Manager.

TARIFF AND GUIDE FREE ON APPLICATION.

IRON AND COAL COMPANIES.

Shares. Company. Paid. Last Pr. Bus. done. Last Call.

100 John Abbot and Co. [L.] £75 0 0 22 20 dis.

100 Blaenavon Iron and Steel Co. [L.] 7 10 0 25 26 pm.

100 Bolckow, Vaughan, and Co. [L.] 30 0 0 25 26 pm.

100 Brown, John, and Co. [L.] 70 0 0 5 3 dis.

100 Consett Iron Co. [L.] 7 10 0 4 4 1/2 pm.

100 Cammell and Co. [L.] 80 0 0 18 16 dis.

100 Ebble Vale Co. [L.] 27 10 0 9 9 1/2 dis.

100 General Mining Association [L.] 20 0 0 5 7

100 Hopkiss, Gilkes, and Co. [L.] 10 0 0 par. 1/2 dis.

100 Ironmasters' Company [L.] 10 0 0 par.

100 Midland Iron Co. [L.] 5 0 0 22 25 pm.

2 1/2 Mersey Steel and Iron Co. [L.] 11 10 0 8 7 1/2 dis.

4 Myndy Iron Ore Co. [L.] 3 10 0 2 2 1/2 dis.

100 Nerbudda Coal and Iron 0 7 0 par.

100 Palmer's Shipbuilding and Iron Co. [L.] 25 0 0 1 1 1/2 dis.

100 Ditto ditto 10 0 0 5 5 pm.

100 Parkgate Iron Co. [L.] 65 0 0 1 1 1/2 dis.

20 Patent Shaft and Axletree Co. [L.] 10 0 0 5 5 pm.

100 Rhymney Iron Co. [L.] 50 0 0 20 18 dis.

15 Ditto New 15 0 0 6 3 1/2 dis.

50 Shotts Iron Co. 50 0 0 21 19 dis.

100 Sheepbridge Iron and Coal Co. [L.] 55 0 0 17 16 dis.

100 Staveley Iron and Coal Co. 60 0 0 40 42 1/2 pm.

100 Ditto ditto New 10 0 0 8 9 pm.

100 Thames Iron Company 5 0 0 —

7 1/2 Titanic Iron and Steel 5 0 0 —

100 Vancouver Coal [L.] 6 0 0 1/2 dis. par.

100 Van Iron Ore [L.] 10 0 0 —

100 Wigan Coal and Iron Co 100 0 0 11 9 dis.

75 Ditto ditto 75 0 0 11 9 dis.

THE MINING SHARE LIST

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
1500 Alderley Edge, c. Cheshire*	10 0 0	—	—	10 6 8. 0 5 0. Jan. 1869	
6000 Boscawell, t. c. St. Just	1 0 0	—	—	0 2 0. 0 2 0. Apr. 1870	
200 Botolph Claydon, t. c. St. Just	91 5 0	225	220 230	585 5 0. 5 0 0. Nov. 1870	
20000 Bronfloyd, t. Cardigan*	2 10 0	2 1/2	2 1/2	2 11 0. 0 1 0. Jan. 1871	
4000 Brookwood, c. Buckfastleigh	1 16 0	—	—	0 15 0. 0 2 6. Nov. 1870	
5000 Bwlch Consols, s. t. Cardigan*	4 0 0	—	—	0 9 0. 0 2 0. May 1870	
6000 Canabwell, t. Cumberland*	2 10 0	—	—	0 14 6. 0 2 0. Dec. 1870	
916 Carrigill, s. t. Newlyn	16 5 7	3	2 1/2 3 1/2	16 15 0. 0 10 0. Aug. 1869	
24500 Cwm Kitchen, c. Illogan*	19 14 9	20	19 1/2 20 1/2	5 5 6. 0 12 6. Jan. 1871	
867 Cwm Eryn, t. Cardiganshire*	7 10 0	—	—	32 13 0. 0 5 0. Jan. 1871	
128 Cwmystwith, t. Cardiganshire*	60 0 0	—	—	387 10 0. 0 2 0. July 1869	
280 Derwent Mines, s. t. Durham*	300 0 0	—	—	177 0 0. 0 10 0. July 1868	
1024 Devon Gl. Consols, c. Tavistock*	1 0 0	105	100 110	1149 0 0. 4 0 0. Nov. 1870	
656 Ding Dong, t. Gwylvaeth	49 14 6	17	—	7 10 0. 0 15 0. Aug. 1870	
14300 Dole, c. t. Canbourn*	32 4 6	139	127 1/2 132 1/2	251 2 6. 0 0 0. Dec. 1870	
12800 Drake Walls, t. Calstock*	2 10 0	1 1/2	1 1/2	1 3 3. 0 1 0. July 1870	
6144 East Caradon, c. St. Cleer*	2 14 6	5	5 5 1/2	14 11 6. 0 3 0. July 1867	
3000 East Darren, t. Cardiganshire*	32 0 0	—	—	185 10 0. 0 2 0. Sept. 1870	
6400 East Pool, t. c. Pool, Illogan	0 9 0	11	10 1/2 11	11 1 3. 0 4 0. Jan. 1871	
1906 East Wheel Lovell, t. Wendron*	3 9 0	32	31 32	14 16 0. 0 2 0. Nov. 1870	
2800 Foxdale, t. Isle of Man*	25 0 0	—	—	77 5 0. 0 10 0. Dec. 1870	
5000 Frank Mills, t. Christow*	2 18 6	1 1/2	1 1/2 1 1/2	4 8 0. 0 2 6. Aug. 1870	
15000 Gawton, c. t. Canbourn*	4 0 0	18	17 1/2 18 1/2	13 9 0. 0 8 0. Dec. 1870	
3000 Great Northern Manganese*	5 0 0	—	—	—	—
5908 Great Wheel Vor, t. c. Helston*	40 0 0	7 1/2	5 5 1/2	15 12 0. 0 3 6. June 1870	
10240 Gunnslake (Chilfers), t. c. —	4 19 0	—	—	0 2 0. 0 1 0. Nov. 1870	
1024 Herodsworth, t. near Liskeard*	8 10 0	43	41 43	54 0 0. 1 10 0. Oct. 1870	
2000 Holmshush and Kelly Bray, c. —	1 0 0	—	—	0 3 0. 0 1 0. Nov. 1869	
10000 Killoe, t. Tipperary	1 0 0	—	—	0 2 2. 0 0 7. June 1870	
165 Levant, c. t. St. Just	10 8 1	—	—	1101 0 0. 0 0 0. Aug. 1869	
4000 Llanmole, t. Cardiganshire*	80 0 0	60	58 60	529 0 0. 0 2 0. Jan. 1870	
3000 Mace-y-Safn, t. Flint*	20 0 0	—	—	4 0 0. 0 5 0. Oct. 1868	
9000 Marke Valley, c. Caradon	4 10 6	7 1/2	6 7 1/2	6 14 0. 0 4 0. Jan. 1871	
18000 Minera Mining Co., t. Wrexham*	25 0 0	—	—	282 3 8. 4 0 0. Nov. 1870	
20000 Mining Co. of Ireland, c. t. —	7 0 0	9 1/2	—	0 4 6 1/2. 0 2 1. July 1870	
6400 New Pembroke, t. c. Par Station	5 0 0	5	5 5 1/2	0 5 0. 0 2 6. Nov. 1870	
2000 North Levant, t. c. St. Just	10 12 0	11 1/2	11 1/2 12	1 15 0. 0 10 0. Aug. 1870	
5610 North Wheel Crofty, c. Illogan*	3 11 3	2 1/2	2 1/2 2 1/2	4 0 0. 0 1 6. Oct. 1870	
256 Penardun United, t. c. Camb.	80 0 0	60	58 60	15 0 0. 0 15 0. Dec. 1870	
5000 Penhalia, t. St. Agnes*	3 0 0	5 1/2	5 1/2	1 16 6. 0 3 0. Feb. 1871	
500 Phenix, t. c. Linkinhorne	50 0 0	—	—	456 10 0. 0 7 0. May 1870	
2000 Poldice, t. c. Gwennap	10 0 0	—	—	1 10 0. 0 10 0. Oct. 1870	
12800 Prince of Wales, c. Calstock	0 12 6	1 1/2	1 1/2 1 1/2	0 10 0. 0 1 0. Nov. 1869	
1120 Providence, t. Uny Lelant*	10 6 7	36	35 36	100 12 6. 1 0 0. Dec. 1870	
15000 Queen, s. t. Calstock*	0 10 0	2	—	0 2 0. 0 1 0. Dec. 1870	
5869 Rosewall Hill & Ransom, t. —	4 0 0	1 1/2	1 1/2 1 1/2	0 13 0. 0 1 6. Dec. 1870	
512 South Caradon, c. St. —	1 2 0	250	250 260	659 10 0. 4 0 0. Jan. 1871	
6000 South Darren, t. Cardigan*	3 6 6	—	—	0 3 0. 0 1 0. Nov. 1870	
937 South Wh. Crofty, c. Illogan	24 10 10	6	6 1/2 7	3 0 0. 0 10 0. June 1870	
496 So. Wh. Frances, c. Illog. t. —	18 19 9	29	29 30	374 13 6. 1 0 0. Mar. 1868	
242 Spearhead, t. St. Just	36 17 9	15	18 21	14 15 0. 1 0 0. Oct. 1870	
940 St. Ives Consols, t. St. Ives	10 15 0	—	—	0 10 0. 0 10 0. May 1869	
8771 St. Just Amalgamated, t. —	3 10 0	—	—	0 5 0. 0 2 6. Nov. 1870	
12000 Tankerville, t. Salop*	6 0 0	13	12 1/2 13 1/2	0 14 0. 0 4 0. Jan. 1871	
6000 Thieroff, c. t. Pool, Illogan*	9 0 0	49	45 50	27 8 6. 1 10 0. Nov. 1870	
2000 Transport Co., t. Helston	2 0 0	22	20 22	12 7 0. 0 15 0. Dec. 1870	
12000 t. Llanidloes*	4 5 0	55	53 55	3 10 0. 0 15 0. Dec. 1870	
3000 W. Chiverton, t. Perranzabuloe	10 0 0	49	44 45	47 7 6. 0 2 0. Nov. 1870	
512 West Wheel Frances, t. Illogan	106 15 0	32	28 30	5 10 0. 1 0 0. Jan. 1871	
400 W. Wheel Seton, c. Canbourn*	47 0 0	110	110 120	669 0 0. 0 2 10 0. Dec. 1870	
512 Wheel Basset, c. Illog. t. —	5 2 6	70	60 65	632 10 0. 1 0 0. June 1868	
512 Wheel Jane, s. t. c. —	10 15 0	55	50 52 1/2	33 10 0. 1 10 0. Nov. 1870	
4295 Wheel Kitty, t. St. Agnes	5 4 6	9 1/2	9 9 1/2	5 13 0. 0 7 0. Nov. 1870	
1024 Wheel Killy, t. Uny Lelant*	3 10 0	10	9 10	7 15 0. 0 10 0. Nov. 1870	
406 Wheel Mary Ann, t. Menheniot*	13 17 6	—	—	78 15 0. 0 10 0. Nov. 1870	
1024 Wheel Mary Ann, t. Menheniot*	8 0 0	13	13 14	71 17 6. 0 10 0. Dec. 1870	
1000 Wh. Mary Hutchins, t. Plymouth	2 12 6	—	—	0 10 0. 0 10 0. Aug. 1869	
80 Wheel Owies, t. St. Just	70 0 0	—	—	474 13 0. 0 10 0. Nov. 1870	
12000 Wheel Russell, c. Tavistock	1 0 0	—	—	0 1 0. 0 1 0. Dec. 1870	
396 Wheel Seton, c. t. Canbourn*	60 0 0	26	23 25	254 15 0. 0 2 0. Feb. 1869	
17000 Wicklow, c. t. Wicklow	2 10 0	8	7 1/2 8	60 2 6. 0 2 6. Sept. 1870	

FOREIGN DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
35000 Alamos, t. Spain*	2 0 0	2 1/2	1 1/2 2 1/2	0 13 0. 0 2 6. Oct. 1870	
130000 Almaden & Tinto Consolidated, s. t. —	1 0 0	1	1 1/2 1 1/2	0 1 6. 0 1 6. Oct. 1870	
20000 Australian, c. South Australia*	7 7 6	—	—	0 1 6. 0 0 6. Aug. 1868	
50000 Cape Copper Mining*	7 0 0	16	16 1/2 17 1/2	5 17 6. 0 10 0. May 1870	
10000 Central American Association*	0 15 0	—	—	0 6 0. 0 1 0. July 1869	
21000 Colorado Mining Co., t. Colorado*	5 0 0	4 1/2	4 1/2 4 1/2	2 6 0. 0 2 6. Nov. 1870	
10000 Copahu Mining Co., t. Chile*	16 10 0	3	2 3	0 4 0. 0 4 0. April 1869	
76162 Don Pedro North del Rey*	0 14 0	2 1/2	1 1/2 2 1/2	2 3 0. 0 0 0. Mar. 1870	
70000 English and Australian, c. —	2 10 0	—	—	1 19 0. 0 0 9. Feb. 1869	